

SECTION d
Curriculum

Schedule 7d: Curriculum

English Language Arts

- DPSA Introduction ELA
- 9-12 ELA Pacing Guides with Standard Descriptions
- 9-12 ELA Curriculum Maps

Detroit Public Safety Academy



Literacy Best Practice Framework

ELA Introduction

What is Best Practice? This is a term that is used frequently in education, but do we really understand or agree exactly what it is? For our purposes we have developed the following working definition:

A best practice classroom is one that uses current research, follows district and state standards and is student-centered, active, experiential, authentic, democratic, collaborative, rigorous and challenging.

Therefore, DPSA will impose a theoretical framework that is student centered and includes the cognitive and social aspects of learning. This is Tier I of the RTI model.

- Student-centered learning is experiential, holistic, authentic and challenging. This includes rich hands-on experiences, authentic literature, student choice, and student responsibility for learning.
- Cognitive principles are developmental, constructivist, expressive and reflective. This includes higher-order thinking, inquiry, and time for students to express their learning in a variety of ways.

- Social principles are collaborative and democratic. Classrooms need to be interactive in a variety of ways.
- Social principles are collaborative and democratic. Classrooms need to be interactive and model real life community.

Within this framework, teachers will use the Gradual Release of Responsibility Model. Teachers will model for students, giving them time for practice with guidance and feedback. This will be followed by independent practice where strategies taught will be applied to real reading and writing.

This document is organized in the following categories:

- Qualities of Best Practice-characteristics of quality reading and writing instruction.
- Structures of Best Practice-implementing and organizing literacy instruction

It is important to note that this document represents our vision for what literacy instruction should look like in our high school classrooms. However, we recognize this framework will take multiple years, extensive professional development and funding to reach the vision. The team also envisions the teachers, support staff, and administration as key members in moving this vision forward.

What do Best Practice teachers do? How do they act, implement, and live out their principles? There are some basic recurrent structures for organizing students, time, materials, space, and guidance. These elements will shift the classroom balance from teacher-directed to students-centered learning. These instructional methods have been used throughout the years. These key structures rely on well-developed routines and training of students.

Within a Balanced Literacy approach, the following structures are evident:

- Reflective Assessment
- Instructional Practices
 - Whole Group Instruction
 - Small Group Instruction/Conferring
 - Individual Conferring
- Integrative Units

Reflective Assessment

When teachers use formative and/or summative assessments, the analysis of the assessments should be reflective and guide instruction. Assessments are analyzed which allow teachers to gain deeper and more practical information about students' learning. Student growth is monitored in richer and more sophisticated ways. Assessment guides instruction, helping to make daily decisions that promote student growth such as goal setting, and monitoring, and evaluating their work. During conferences teachers gather information about a particular child, which enables her/him to scaffold the child in their learning. This is ongoing and helps the teacher accelerate the child's learning. An effective way of student monitoring is using

portfolios to show changes over time. Additionally, students can peer evaluate and/or self through the use of checklists, rubrics, or other forms. Teachers use anecdotal and observational records (i.e. running records, conference notes) to help instruction. Teachers need to record their observations in a systematic way. These records are also used to inform parents of their children's progress.

Whole Group Instruction

Teachers provide whole group instruction of one skill or strategy to introduce, revisit, or expand a concept. Mini-lessons are short instructional pieces focusing on a particular skill or strategy. Mini-lessons are 10 to 15 minutes. Teachers use mentor texts, "think-alouds," writing on overhead, Smart Boards, anchor charts, etc. during the mini-lesson.

Small Group Instruction

In Best Practice classrooms, students work together effectively in small groups of five or less. Far more powerful and appropriate uses of collaboration occur when students set up and pursue investigations, read and discuss text in guided reading, literature circles, book clubs, etc. It is within this framework that higher order thinking flourishes.

The following are a few structures for collaborative learning that move students toward higher-level thinking:

- **Guided Reading/Writing** – Teachers provide short on-level reading and writing instruction to re-teach and accelerate student learning. Teachers lend flexible groups of 3-5 students. Students are selected by informal assessment, teacher observation, and perceived needs.
- **Partner/Buddy Reading** – This can include reading aloud, jig sawing a text read by others.
- **Peer Conferencing** – This can involve discussion of a book, written response to text, or receiving feedback on a piece of writing.
- **Literature Circles/Book Clubs** – Groups of four or five students choose and read the same article or text. Student-led groups meet every few days, using their notes as sources for discussion.
- **Group Investigations** – A learning cycle begins with identifying a problem, assessing prior knowledge, and devising an inquiry plan for study.
- **Literacy Stations** – These learning stations are set up to invite active exploration and an element of student choice.

Independent Reading

Reading is the best practice for learning to read. The quantity of children's reading experience is related directly to their achievement levels (Guthrie, in Farstrup and Samuels 2002). Students will be taught how to choose "just right" books (can read independently) and will be provided space and time for sustained independent reading every day at every grade. Teacher guidance will also be provided while students choose books. In addition, this may be time for students to re-read familiar books from guided reading lessons to promote fluency. This also allows students an opportunity to apply strategies taught during whole group mini-lessons

and respond to their reading in a variety of formats. It allows teachers to engage in small groups and one-on-one conferences.

Individual Conferencing

Teachers see students in a one-on-one meeting to talk about their reading and writing. Individual needs are assessed, the teacher decides on one teaching point and instruction is provided in an attempt to lift the child as a reader or writer. The student is an active participant in this meeting. While conferring, which usually takes place during independent reading, teachers will assess, decide, and then teach/demonstrate one strategy that a child can apply to their reading. Teachers will take anecdotal notes as information assessment to guide this teaching. Teachers may reinforce, re-teach, or rephrase to meet the unique needs of each student. Teachers will build from what children already know about language and print.

Tools/Environment in a Workshop Classroom

Reading and writing can be a tool of thinking. There are many ways to represent learning that help students encounter, probe, explore, and remember the content of the curriculum. Reading and writing to learn adds depth and can be integrated into all grades and subject areas. The physical environment as well as quality literature are additional key “tools” necessary in a workshop classroom.

Reading Response/Journal/Reader’s Notebook

Responding to reading allows students to monitor or communicate their ideas. The tools used for this may include a reading response or content journal, sticky notes, or a letter to the teacher. They may also draw their vision of a scene from the story in response to a letter from a partner. This writing and drawing will channel their responses and enhance their comprehension.

Choice

Choice is an integral part of literate behavior. Students will spend less time on isolated workbook pages and skill sheets. The more choices teachers make, the fewer responsibilities left for students. At times, students will be given an opportunity to make structured choices. They will choose to read a variety of genres and will choose how to respond to their reading. This will encourage students to become independent thinkers and learners while building a sense of ownership.

Reading Aloud

Hearing books read aloud is a key to learning to read. Teachers of all grade levels will read aloud to their students each day in order to expose them to a wide and rich range of literature. This teaches students to love stories, build vocabulary, and construct meaning through the use of teacher “think-alouds.” It also lends itself to developing communities and gives students a chance to hear books above their level.

Speaking and Listening

Students will have daily opportunities to talk about their reading. A reading classroom should be filled with talk/listening. Students turn and talk during mini-lessons, and have rich discussion during literature groups and guided reading groups. The skill of conversations

(dialogue) needs to be taught. Students will also have the opportunity to promote an interest in reading during book talks.

Reading Response

Effective teachers help children use reading as a tool for learning. Students will have ample opportunity to respond to literature through the use of Thinking Maps, response journals, sticky notes, think marks, etc. as opposed to workbooks and skill sheets. Students will have many opportunities to respond before, during, and after reading. Teachers will help students savor, share, apply meaning, and build connections to further reading and writing.

Classroom Library

Classrooms will be stocked with a balanced and broad assortment of fiction and nonfiction, including trade books, content-area books, poetry, newspapers, and magazines, all within a large range of difficulty. Students will be taught how to choose “just right” books. Text may be organized by level, genre, author, topic, etc.

Assessment

Reading assessment will match classroom practice. The best assessments drive instruction. Teachers will observe and interact with students as they read authentic texts for genuine purposes, keep anecdotal records such as running records of developing skills, problems, changes, and goals in reading. These formative assessments will be analyzed and used to drive instruction and make adjustments where necessary.

Anchor Charts

An anchor chart is a co-created visual representation of the class’s thinking. These charts may include expected behaviors, definitions or examples of strategies and skills, and students’ understanding. These may come in the form of Thinking Maps, list, sticky note collections, etc. They are a visible resource for all students. Anchor charts are a permanent record of students’ learning.

Technology

Technology is a critical component in the classroom. Students are encouraged to use the computer as a tool for researching information about topics as well as to learn more about authors and books. Students may also use technology to support their final draft of written work through the use of word processing and presentation software. Smart Board and digital cameras can also be used creatively to support student learning and presentation.

Integrated Units

Content does matter and integrated units are one way to address this. However, standards must be addressed. The components of the standards are then incorporated within the newly created units of study. Integration involves making connections between reading and writing across the content areas. Teachers create units of study where the reciprocity of reading and writing is evident. For example, as students are preparing to write poetry, the teacher would immerse students in the reading of poetry. This helps students see the connectedness of reading and writing in a meaningful way.

2021-22 Quarterly Pacing Guide - Priority

| 9th grade | ELA CCSS | | | Q1 | Q2 | Q3 | Q4 |
|-------------------|---|-------------------|---|----|----|----|----|
| RL.9-10 | Reading - Literature | RI.9-10 | Reading - Informational Text | | | | |
| RL.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | RI.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | P | P | P | P |
| RL.9-10.2 | Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | RI.9-10.2 | Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | P | P | P | P |
| RL.9-10.3 | Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme. | RI.9-10.3 | Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them. | I | P | P | P |
| RL.9-10.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). | RI.9-10.4 | Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper). | P | P | P | P |
| RL.9-10.5 | Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise. | RI.9-10.5 | Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter). | | I | P | |
| RL.9-10.6 | Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature. | RI.9-10.6 | Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose. | | I | I | P |
| RL.9-10.7 | Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment (e.g., Auden's "Musée des Beaux Arts" and Breughel's Landscape with the Fall of Icarus). | RI.9-10.7 | Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account. | | | P | |
| RL.9-10.8 | (Not applicable to literature) | RI.9-10.8 | Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning. | | | | P |
| RL.9-10.9 | Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare). | RI.9-10.9 | Analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"), including how they address related themes and concepts. | | I | P | P |
| RL.9-10.10 | By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. | RI.9-10.10 | By the end of grade 9, read and comprehend literary nonfiction in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. | *P | *P | *P | *P |
| RL.9-10.11 | By the end of grade 10, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 9–10 text complexity band independently and proficiently. | RI.9-10.11 | By the end of grade 10, read and comprehend literary nonfiction at the high end of the grades 9–10 text complexity band independently and proficiently. | *P | *P | *P | *P |
| W.9-10 | Writing | | | | | | |
| W.9-10.1 | Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. | | | | | P | |
| W.9-10.1a | Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence. | | | | | P | |
| W.9-10.1b | Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns. | | | | | P | |
| W.9-10.1c | Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. | | | | | P | |
| W.9-10.1d | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | | | | | P | |
| W.9-10.1e | Provide a concluding statement or section that follows from and supports the argument presented. | | | | | P | |
| W.9-10.2 | Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. | | | | I | P | P |
| W.9-10.2a | Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. | | | | I | P | P |
| W.9-10.2b | Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. | | | | I | P | P |
| W.9-10.2c | Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. | | | | I | P | P |
| W.9-10.2d | Use precise language and domain-specific vocabulary to manage the complexity of the topic. | | | | | P | P |
| W.9-10.2e | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | | | | | P | P |
| W.9-10.2f | Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative. | | | | | P | P |

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| 9th grade | ELA CCSS | Q1 | Q2 | Q3 | Q4 |
|----------------|--|----|----|----|----|
| W.9-10.3 | Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. | P | | | |
| W.9-10.3a | Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. | P | | | |
| W.9-10.3b | Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. | I | P | | |
| W.9-10.3c | Use a variety of techniques to sequence events so that they build on one another to create a coherent whole. | P | | | |
| W.9-10.3d | Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. | I | P | | |
| W.9-10.3e | Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative. | P | | | |
| W.9-10.4 | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. | I | I | P | P |
| W.9-10.5 | Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. | I | I | P | P |
| W.9-10.6 | Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically. | I | I | P | P |
| W.9-10.7 | Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. | | | I | P |
| W.9-10.8 | Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. | | I | P | P |
| W.9-10.9 | Draw evidence from literary or informational texts to support analysis, reflection, and research. | I | I | P | P |
| W.9-10.9a | Apply grades 9–10 Reading standards to literature (e.g., “Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]”). | | | P | |
| W.9-10.09b | Apply grades 9–10 Reading standards to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning”). | | | P | |
| W.9-10.10 | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences. | I | I | P | P |
| W.9-10.11 | The CCR anchor standards and high school grade-specific standards work in tandem to define college and career readiness expectations—the former providing broad standards, the latter providing additional specificity. | | | | P |
| SL.9-10 | Speaking and Listening | | | | |
| SL.9-10.1 | Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively. | I | I | P | |
| SL.9-10.1a | Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | I | I | I | P |
| SL.9-10.1b | Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed. | I | P | | |
| SL.9-10.1c | Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. | | | P | |
| SL.9-10.1d | Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented. | | I | I | P |
| SL.9-10.2 | Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source. | | I | | P |
| SL.9-10.3 | Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence. | I | | P | |
| SL.9-10.4 | Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task. | | | P | |
| SL.9-10.5 | Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. | | | | P |
| SL.9-10.6 | Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. | | | P | |
| L.9-10 | Language | | | | |
| L.9-10.1 | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. | I | | | P |
| L.9-10.1a | Use parallel structure. | I | I | P | |
| L.9-10.1b | Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations. | I | | | P |
| L.9-10.2 | Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. | I | | | P |
| L.9-10.2a | Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses. | | | | P |
| L.9-10.2b | Use a colon to introduce a list or quotation. | | | | P |

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| 9th grade | ELA CCSS | Q1 | Q2 | Q3 | Q4 |
|--------------------------------|--|----------|----------|-----------|-----------|
| L.9-10.2c | Spell correctly. | I | | | P |
| L.9-10.3 | Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. Write and edit work so that it conforms to the guidelines in a style manual (e.g., MLA Handbook, Turabian's Manual for Writers) appropriate for the discipline and writing type. | | I | I | P |
| L.9-10.4 | Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies. | I | | | P |
| L.9-10.4a | Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. | I | | | P |
| L.9-10.4b | Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical; advocate, advocacy). | I | | | P |
| L.9-10.4c | Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology. | I | | | P |
| L.9-10.4d | Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). | I | | | P |
| L.9-10.5 | Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. | I | I | P | |
| L.9-10.5a | Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text. | I | I | P | |
| L.9-10.5b | Analyze nuances in the meaning of words with similar denotations. | | P | | |
| L.9-10.6 | Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. | I | P | P | P |
| New Standards: | | 7 | 9 | 29 | 21 |
| Review Standards: | | 0 | 3 | 5 | 16 |
| Major Work of the Grade | | 4 | 7 | 14 | 15 |

[9-12 \(Grade Band\) - 2020–21 Priority Instructional Content in English Language Arts/Literacy - Achieve the Core](#)

[2020–21 Priority Instructional Content in English Language Arts/Literacy - Achieve the Core](#)

*Made proficient in all four quarters based on the focus on grade level text in guidance document

2021-22 Quarterly Pacing Guide - Priority

| 10th grade | ELA CCSS | | | Q1 | Q2 | Q3 | Q4 |
|-------------------|---|-------------------|---|----|----|----|----|
| RL.9-10 | Reading - Literature | RI.9-10 | Reading - Informational Text | | | | |
| RL.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | RI.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | P | P | P | P |
| RL.9-10.2 | Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | RI.9-10.2 | Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | P | P | P | P |
| RL.9-10.3 | Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme. | RI.9-10.3 | Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them. | P | P | P | P |
| RL.9-10.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). | RI.9-10.4 | Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper). | P | P | P | P |
| RL.9-10.5 | Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise. | RI.9-10.5 | Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter). | | P | | |
| RL.9-10.6 | Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature. | RI.9-10.6 | Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose. | | P | | |
| RL.9-10.7 | Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment (e.g., Auden's "Musée des Beaux Arts" and Bruegel's Landscape with the Fall of Icarus). | RI.9-10.7 | Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account. | | | P | |
| RL.9-10.8 | (Not applicable to literature) | RI.9-10.8 | Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning. | | | | P |
| RL.9-10.9 | Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare). | RI.9-10.9 | Analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"), including how they address related themes and concepts. | I | I | P | P |
| RL.9-10.10 | By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. | RI.9-10.10 | By the end of grade 9, read and comprehend literary nonfiction in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. | *P | *P | *P | *P |
| RL.9-10.11 | By the end of grade 10, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 9–10 text complexity band independently and proficiently. | RI.9-10.11 | By the end of grade 10, read and comprehend literary nonfiction at the high end of the grades 9–10 text complexity band independently and proficiently. | *P | *P | *P | *P |
| W.9-10 | Writing | | | | | | |
| W.9-10.1 | Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. | | | | | P | |
| W.9-10.1a | Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence. | | | | | P | |
| W.9-10.1b | Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns. | | | | | P | |
| W.9-10.1c | Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. | | | | | P | |
| W.9-10.1d | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | | | | | P | |
| W.9-10.1e | Provide a concluding statement or section that follows from and supports the argument presented. | | | | | P | |
| W.9-10.2 | Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. | | | | | P | P |
| W.9-10.2a | Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. | | | | | P | P |

| | | | | | |
|----------------|--|---|---|---|---|
| W.9-10.2b | Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. | | | P | P |
| W.9-10.2c | Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. | | | P | P |
| W.9-10.2d | Use precise language and domain-specific vocabulary to manage the complexity of the topic. | | | P | P |
| W.9-10.2e | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | | | P | P |
| W.9-10.2f | Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative. | | | P | P |
| W.9-10.3 | Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. | | P | | |
| W.9-10.3a | Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. | | P | | |
| W.9-10.3b | Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. | I | P | | |
| W.9-10.3c | Use a variety of techniques to sequence events so that they build on one another to create a coherent whole. | P | | | |
| W.9-10.3d | Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. | I | P | | |
| W.9-10.3e | Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative. | | | P | |
| W.9-10.4 | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. | I | I | P | P |
| W.9-10.5 | Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. | I | I | P | P |
| W.9-10.6 | Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically. | I | I | I | P |
| W.9-10.7 | Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. | | | | P |
| W.9-10.8 | Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. | I | I | P | P |
| W.9-10.9 | Draw evidence from literary or informational texts to support analysis, reflection, and research. | I | I | P | P |
| W.9-10.9a | Apply grades 9–10 Reading standards to literature (e.g., “Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]”). | | | P | |
| W.9-10.9b | Apply grades 9–10 Reading standards to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning”). | | | P | |
| W.9-10.10 | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences. | I | P | P | P |
| W.9-10.11 | The CCR anchor standards and high school grade-specific standards work in tandem to define college and career readiness expectations—the former providing broad standards, the latter providing additional specificity. | | | | P |
| SL.9-10 | Speaking and Listening | | | | |
| SL.9-10.1 | Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. | P | | | |
| SL.9-10.1a | Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | I | I | I | P |
| SL.9-10.1b | Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed. | P | | | |
| SL.9-10.1c | Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. | P | P | P | P |
| SL.9-10.1d | Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented. | P | P | P | P |
| SL.9-10.2 | Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source. | | I | | P |
| SL.9-10.3 | Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence. | P | P | P | P |
| SL.9-10.4 | Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task. | | | P | |
| SL.9-10.5 | Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. | | | | P |
| SL.9-10.6 | Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. | P | P | P | P |
| L.9-10 | Language | | | | |
| L.9-10.1 | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. | I | | | P |
| L.9-10.1a | Use parallel structure. | P | | | |

| | | | | | |
|-----------|--|-----------|-----------|-----------|-----------|
| L.9-10.1b | Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations. | I | | | P |
| L.9-10.2 | Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. | I | | | P |
| L.9-10.2a | Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses. | | | | P |
| L.9-10.2b | Use a colon to introduce a list or quotation. | | | | P |
| L.9-10.2c | Spell correctly. | I | | | P |
| L.9-10.3 | Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. Write and edit work so that it conforms to the guidelines in a style manual (e.g., MLA Handbook, Turabian's Manual for Writers) appropriate for the discipline and writing type. | | I | I | P |
| L.9-10.4 | Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies. | I | | | P |
| L.9-10.4a | Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. | I | | | P |
| L.9-10.4b | Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical; advocate, advocacy). | I | | | P |
| L.9-10.4c | Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology. | I | | | P |
| L.9-10.4d | Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). | I | | | P |
| L.9-10.5 | Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. | P | | | |
| L.9-10.5a | Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text. | P | | | |
| L.9-10.5b | Analyze nuances in the meaning of words with similar denotations. | | P | | |
| L.9-10.6 | Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. | I | P | P | P |
| | New Standards: | 15 | 13 | 25 | 25 |
| | Review Standards: | 0 | 9 | 13 | 24 |
| | Major Work of the Grade | 10 | 8 | 12 | 16 |
| | 9-12 (Grade Band) - 2020–21 Priority Instructional Content in English Language Arts/Literacy - Achieve the Core | | | | |
| | 2020–21 Priority Instructional Content in English Language Arts/Literacy - Achieve the Core | | | | |

*Made proficient in all four quarters based on the focus on grade level text in guidance document

2021-22 Quarterly Pacing Guide - Priority

| 11th Grade | ELA CCSS | | | Q1 | Q2 | Q3 | Q4 |
|--------------------|--|--------------------|---|----|----|----|----|
| RL.11-12 | Reading - Literature | RI.11-12 | Reading - Informational Text | | | | |
| RL.11-12.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. | RI.11-12.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. | P | P | P | P |
| RL.11-12.2 | Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. | RI.11-12.2 | Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text. | P | P | P | P |
| RL.11-12.3 | Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). | RI.11-12.3 | Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. | P | P | P | P |
| RL.11-12.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) | RI.11-12.4 | Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines faction in Federalist No. 10). | P | P | P | P |
| RL.11-12.5 | Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact. | RI.11-12.5 | Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging. | I | | P | P |
| RL.11-12.6 | Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement). | RI.11-12.6 | Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness or beauty of the text. | | I | P | P |
| RL.11-12.7 | Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.) | RI.11-12.7 | Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem. | | | I | P |
| RL.11-12.8 | (Not applicable to literature) | RI.11-12.8 | Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses). | | | P | |
| RL.11-12.9 | Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics. | RI.11-12.9 | Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features. | I | | P | P |
| RL.11-12.10 | By the end of grade 11, read and comprehend literature, including stories, dramas, and poems, in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. | RI.11-12.10 | By the end of grade 11, read and comprehend literary nonfiction in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. | *P | *P | *P | *P |
| W.11-12 | Writing | | | | | | |
| W.11-12.1 | Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. | | | P | | P | P |
| W.11-12.1a | Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence. | | | I | | P | P |
| W.11-12.1b | Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases. | | | I | | P | P |
| W.11-12.1c | Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. | | | I | | P | P |
| W.11-12.1d | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | | | I | | P | P |
| W.11-12.1e | Provide a concluding statement or section that follows from and supports the argument presented. | | | I | | P | P |
| W.11-12.2 | Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. | | | I | P | | P |
| W.11-12.2a | Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. | | | I | P | | P |
| W.11-12.2b | Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. | | | I | P | | P |
| W.11-12.2c | Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. | | | I | P | | P |
| W.11-12.2d | Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. | | | I | P | | P |
| W.11-12.2e | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | | | I | P | | P |

2021-22 Quarterly Pacing Guide - Priority

| 11th Grade | ELA CCSS | | Q1 | Q2 | Q3 | Q4 |
|-------------|--|--|----|----|----|----|
| W.11-12.2f | Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic). | | I | P | | P |
| W.11-12.3 | Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. | | | I | | P |
| W.11-12.3a | Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. | | P | I | | |
| W.11-12.3b | Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. | | P | I | | |
| W.11-12.3c | Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution). | | P | I | | |
| W.11-12.3d | Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. | | P | I | | |
| W.11-12.3e | Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative. | | | I | | P |
| W.11-12.4 | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. | | P | | | P |
| W.11-12.5 | Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. | | P | | | P |
| W.11-12.6 | Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. | | P | | P | P |
| W.11-12.7 | Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. | | P | P | P | |
| W.11-12.8 | Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. | | P | | P | |
| W.11-12.9 | Draw evidence from literary or informational texts to support analysis, reflection, and research. | | P | | P | |
| W.11-12.9a | Apply grades 11–12 Reading standards to literature (e.g., “Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics”). | | P | | | P |
| W.11-12.9b | Apply grades 11–12 Reading standards to literary nonfiction (e.g., “Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning [e.g., in U.S. Supreme Court Case majority opinions and dissents] and the premises, purposes, and arguments in works of public advocacy [e.g., The Federalist, presidential addresses]”). | | P | | | P |
| W.11-12.10 | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes and audiences. | | I | | | P |
| SL.11-12 | Speaking and Listening | | | | | |
| SL.11-12.1 | Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively. | | I | P | | |
| SL.11-12.1a | Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | | I | P | | |
| SL.11-12.1b | Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed. | | I | P | | |
| SL.11-12.1c | Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. | | I | P | P | |
| SL.11-12.1d | Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task. | | I | P | P | |
| SL.11-12.2 | Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. | | | | P | |
| SL.11-12.3 | Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used. | | I | | | P |
| SL.11-12.4 | Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range or formal and informal tasks. | | I | | P | |
| SL.11-12.5 | Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. | | | I | P | |
| SL.11-12.6 | Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. | | I | | | P |
| SL.11-12.7 | The CCR anchor standards and high school grade-specific standards work in tandem to define college and career readiness expectations—the former providing broad standards, the latter providing additional specificity. | | I | | | P |
| L.11-12 | Language | | | | | |
| L.11-12.1 | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. | | I | | | P |
| L.11-12.1a | Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested. | | I | | | P |
| L.11-12.1b | Resolve issues of complex or contested usage, consulting references (e.g., Merriam-Webster’s Dictionary of English Usage, Garner’s Modern American Usage) as needed. | | I | | P | |
| L.11-12.2 | Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. | | I | | P | |
| L.11-12.2a | Observe hyphenation conventions. | | P | | | |
| L.11-12.2b | Spell correctly. | | I | | P | |

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| 11th Grade | ELA CCSS | | Q1 | Q2 | Q3 | Q4 |
|------------|---|--------------------------------|-----------|-----------|-----------|-----------|
| L.11-12.3 | Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. Vary syntax for effect, consulting references (e.g., Tufte's Artful Sentences) for guidance as needed; apply an understanding of syntax to the study of complex texts when reading. | | I | | P | |
| L.11-12.4 | Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies. | | I | P | | |
| L.11-12.4a | Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. | | I | P | | |
| L.11-12.4b | Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable). | | I | P | | |
| L.11-12.4c | Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. | | I | P | | |
| L.11-12.4d | Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). | | I | P | | |
| L.11-12.5 | Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. | | | | P | |
| L.11-12.5a | Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text. | | | | P | |
| L.11-12.5b | Analyze nuances in the meaning of words with similar denotations. | | | | P | |
| L.11-12.6 | Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. | | P | P | P | P |
| | | New Standards: | 21 | 16 | 23 | 23 |
| | | Review Standards: | 0 | 8 | 12 | 28 |
| | | Major Work of the Grade | 8 | 14 | 12 | 7 |
| | 9-12 (Grade Band) - 2020–21 Priority Instructional Content in English Language Arts/Literacy - Achieve the Core | | | | | |
| | 2020–21 Priority Instructional Content in English Language Arts/Literacy - Achieve the Core | | | | | |
| | *Made proficient in all four quarters based on the focus on grade level text in guidance document | | | | | |



2021-22 Quarterly Pacing Guide - Priority

| 12th grade | ELA CCSS | Q1 | Q2 | Q3 | Q4 |
|------------|--|----|----|----|----|
| RL.11-12 | Reading - Literature | | | | |
| RL.11-12.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. | P | P | P | P |
| RL.11-12.2 | Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. | P | P | P | P |
| RL.11-12.3 | Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). | P | P | | |
| RL.11-12.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) | P | P | P | P |
| RL.11-12.5 | Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact. | P | P | | |
| RL.11-12.6 | Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement). | I | P | P | |
| RL.11-12.7 | Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.) | P | P | P | |
| RL.11-12.8 | (Not applicable to literature) | | | | |
| RL.11-12.9 | Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics. | P | P | | |



2021-22 Quarterly Pacing Guide - Priority

| 12th grade | ELA CCSS | Q1 | Q2 | Q3 | Q4 |
|--------------------|--|----|----|----|----|
| RL.11-12.11 | By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 11–CCR text complexity band independently and proficiently. | *P | *P | *P | *P |
| RI.11-12 | Reading - Informational Text | | | | |
| RI.11-12.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. | P | P | P | P |
| RI.11-12.2 | Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text. | | | P | P |
| RI.11-12.3 | Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. | | | P | P |
| RI.11-12.4 | Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines faction in Federalist No. 10). | P | P | P | P |
| RI.11-12.5 | Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging. | | | P | |
| RI.11-12.6 | Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness or beauty of the text. | | P | P | |
| RI.11-12.7 | Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem. | I | P | P | P |
| RI.11-12.8 | Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses). | | | P | P |



2021-22 Quarterly Pacing Guide - Priority

| 12th grade | ELA CCSS | Q1 | Q2 | Q3 | Q4 |
|----------------|--|----|----|----|----|
| RI.11-12.9 | Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln’s Second Inaugural Address) for their themes, purposes, and rhetorical features. | I | | P | |
| RI.11-12.11 | By the end of grade 12, read and comprehend literary nonfiction at the high end of the grades 11–CCR text complexity band independently and proficiently. | *P | *P | *P | *P |
| W.11-12 | Writing | | | | |
| W.11-12.1 | Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. | P | P | P | |
| W.11-12.1a | Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence. | P | P | P | |
| W.11-12.1b | Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases. | P | P | | |
| W.11-12.1c | Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. | P | P | | |
| W.11-12.1d | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | P | P | | |
| W.11-12.1e | Provide a concluding statement or section that follows from and supports the argument presented. | P | P | | |
| W.11-12.2 | Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. | I | | P | P |
| W.11-12.2a | Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. | I | P | P | P |



2021-22 Quarterly Pacing Guide - Priority

| 12th grade | ELA CCSS | Q1 | Q2 | Q3 | Q4 |
|------------|---|----|----|----|----|
| W.11-12.2b | Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. | I | P | P | P |
| W.11-12.2c | Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. | I | P | P | P |
| W.11-12.2d | Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. | I | P | P | P |
| W.11-12.2e | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | I | P | P | P |
| W.11-12.2f | Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic). | I | P | P | P |
| W.11-12.3 | Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. | P | | | |
| W.11-12.3a | Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. | P | | | |
| W.11-12.3b | Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. | P | | | |
| W.11-12.3c | Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution). | P | | | |
| W.11-12.3d | Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. | P | P | P | P |
| W.11-12.3e | Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative. | P | | | |
| W.11-12.4 | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. | P | P | P | P |



2021-22 Quarterly Pacing Guide - Priority

| 12th grade | ELA CCSS | Q1 | Q2 | Q3 | Q4 |
|------------|---|----|----|----|----|
| W.11-12.5 | Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. | P | P | P | P |
| W.11-12.6 | Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. | P | | | P |
| W.11-12.7 | Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. | P | P | P | P |
| W.11-12.8 | Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. | P | P | | P |
| W.11-12.9 | Draw evidence form literary or informational texts to support analysis, reflection, and research. | P | P | P | P |
| W.11-12.9a | Apply grades 11–12 Reading standards to literature (e.g., “Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics”). | P | | | P |
| W.11-12.9b | Apply grades 11–12 Reading standards to literary nonfiction (e.g., “Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning [e.g., in U.S. Supreme Court Case majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses]”). | P | | | P |
| W.11-12.10 | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes and audiences. | | | | P |



2021-22 Quarterly Pacing Guide - Priority

| 12th grade | ELA CCSS | Q1 | Q2 | Q3 | Q4 |
|--------------------|--|----|----|----|----|
| SL.11-12 | Speaking and Listening | | | | |
| SL.11-12.1 | Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. | P | P | P | P |
| SL.11-12.1a | Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. | P | P | P | P |
| SL.11-12.1b | Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed. | P | | | |
| SL.11-12.1c | Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. | | P | | |
| SL.11-12.1d | Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task. | | P | | |
| SL.11-12.2 | Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. | | | P | |
| SL.11-12.3 | Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used. | | | P | |
| SL.11-12.4 | Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range or formal and informal tasks. | | | P | P |
| SL.11-12.5 | Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. | | | P | P |



2021-22 Quarterly Pacing Guide - Priority

| 12th grade | ELA CCSS | Q1 | Q2 | Q3 | Q4 |
|-------------------|---|----|----|----|----|
| SL.11-12.6 | Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. | P | P | P | P |
| SL.11-12.7 | The CCR anchor standards and high school grade-specific standards work in tandem to define college and career readiness expectations—the former providing broad standards, the latter providing additional specificity. | I | P | P | P |
| L.11-12 | Language | | | | |
| L.11-12.1 | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. | I | P | P | P |
| L.11-12.1a | Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested. | I | | | P |
| L.11-12.1b | Resolve issues of complex or contested usage, consulting references (e.g., Merriam-Webster’s Dictionary of English Usage, Garner’s Modern American Usage) as needed. | I | P | P | P |
| L.11-12.2 | Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. | I | P | P | P |
| L.11-12.2a | Observe hyphenation conventions. | P | P | P | |
| L.11-12.2b | Spell correctly. | I | P | P | P |
| L.11-12.3 | Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. Vary syntax for effect, consulting references (e.g., Tufte’s Artful Sentences) for guidance as needed; apply an understanding of syntax to the study of complex texts when reading. | I | | P | |
| L.11-12.4 | Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies. | I | P | P | P |
| L.11-12.4a | Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase. | I | P | | |
| L.11-12.4b | Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable). | I | P | | |



2021-22 Quarterly Pacing Guide - Priority

| 12th grade | ELA CCSS | Q1 | Q2 | Q3 | Q4 |
|------------|---|-----------|-----------|-----------|-----------|
| L.11-12.4c | Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. | P | | | |
| L.11-12.4d | Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). | I | P | | |
| L.11-12.5 | Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. | I | P | P | P |
| L.11-12.5a | Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text. | I | P | P | P |
| L.11-12.5b | Analyze nuances in the meaning of words with similar denotations. | I | P | P | P |
| L.11-12.6 | Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. | | | | P |
| | New Standards: | 35 | 33 | 11 | 8 |
| | Review Standards: | 0 | 16 | 35 | 35 |
| | Major Work of the Grade | 15 | 20 | 14 | 17 |
| | 9-12 (Grade Band) - 2020–21 Priority Instructional Content in English Language Arts/Literacy - Achieve the Core | | | | |
| | 2020–21 Priority Instructional Content in English Language Arts/Literacy - Achieve the Core | | | | |
| | *Made proficient in all four quarters based on the focus on grade level text in guidance document | | | | |

Curriculum Map 2021-22

QUARTER 1

Unit 1: (30 days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|--|------------------|---|---|---|
| Identify and explain plot structure in short stories; Analyze how authors create the setting of the story; Identify characterization; Identify conflict , conflict types, and plot devices; Explain how visualization and imagery impact the reader; Understand point-of-view; Analyze character traits and motivation; Understand inferences; Analyze setting; Understand how mood affects the story; Understand irony; Analyze symbolism; Understand flashback, foreshadowing; Analyze theme; Write narratives reflective of the short story | RL.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | Identify; analyze; characterization; theme; flashback; symbolism; inference; irony; foreshadowing; point-of-view; imagery | |
| | RL.9-10.2 | Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | | |
| | RL.9-10.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). | | |
| | W.9-10.3 | Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. | | |
| | W.9-10.3a | Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. | | McDougal Littell Literature; "The Most Dangerous Game;" "The Gift of the Magi;" "Horse of the Century;" "The Necklace;" "A Christmas Memory;" "The Cask of Amontillado;" "The Scarlet Ibis" |
| | W.9-10.3c | Use a variety of techniques to sequence events so that they build on one another to create a coherent whole. | | |
| | W.9-10.3e | Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative. | | |
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Unit 2: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|------------------|---|-----------------|
| Identify conflict and conflict types and plot devices | RL.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | Conflict; theme |
| | RL.9-10.2 | Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | |
| | | | |
| | | The Tears of a Tiger | |

Unit 3: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|-------------------|------------------|--|--|
| Analyze Symbolism | RL.9-10.4 | McDougal Littell Literature: poetry | meter, alliteration, simile; metaphor; symbol; sonnet; couplet |
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QUARTER 2

Unit 4: (30 days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|------------------|---|--------------------------------|
| Text dependent analysis;Citing text evidence to support conclusions | RI.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | Vocabulary taken from readings |
| | RI.9-10.2 | Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | |
| | RI.9-10.3 | Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them. | |
| | RI.9-10.4 | Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper). | |
| | W.9-10.2d | Use precise language and domain-specific vocabulary to manage the complexity of the topic. | |
| | W.9-10.2e | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | |
| | W.9-10.2f | Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative. | |
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Unit 5: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
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QUARTER 3

Unit 6: (20 days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|-------------------|------------------|---|--|
| Genre: Nonfiction | RI.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | Personal essay; Memoir; Interview; Cause and Effect; Informal Language; Idioms |
| | RI.9-10.2 | Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | |
| | RI.9-10.3 | Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them. | |
| | RI.9-10.5 | Analyze in detail how an author’s ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter). | |
| | RI.9-10.7 | Analyze various accounts of a subject told in different mediums (e.g., a person’s life story in both print and multimedia), determining which details are emphasized in each account. | |
| | | McDougall Littell Literature: "Life Without Go-Go Boots;" "Mary Mallon's Trail of Typhoid;" "Good Night, Willie Lee, I'll See You in the Morning"; "Unfinished Business" | |

Unit 7: (days)20

| Unit Focus | Standards | Resources | Unit Vocabulary |
|-----------------------|------------------|--|-------------------|
| Character Development | RI.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | Making inferences |
| | RI.9-10.2 | Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | |

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| RI.9-10.5 | Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them. | McDougall Littell Literature: "The Beginning of Something;" "Oranges;" "Young;" "Hanging Fire;" "The First Appendectomy" Reading for Information: Complex Guidelines and Directions | |
| RI.9-10.7 | Analyze various accounts of a subject told in different mediums (e.g., a person’s life story in both print and multimedia), determining which details are emphasized in each account. | | |
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Unit 8: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
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QUARTER 4

Unit 9: (40 days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|--|-----------|-----------------|
| The Classic Tradition: The Odyssey by Homer | RL.9-10.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | | |

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|--|---|------------------|------------------------|
| | <p>RL.9-10.2 Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.</p> <p>RL.9-10.3 Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme.</p> <p>RL.9-10.4 Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).</p> <p>RL.9-10.9 Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare).</p> <p>RL.9-10.10 By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p> <p>W.9-10.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <p>W.9-10.2a Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>W.9-10.2b Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic.</p> | | Epic; odyssey |
| McDougall Littell Literature: The Odyssey | | | |
| Unit 10: (days) | | | |
| Unit Focus | Standards | Resources | Unit Vocabulary |
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QUARTER 1

Unit 1: (20 days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|-----------------|--|---|---|-------------|
| Unit 1: Fiction | RL.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | McDougall Littell Literature: "Harrison Bergeron;" "By the Waters of Babylon;" Author Study-Ray Bradbury=Life and Times, "A Sound of Thunder," "There Will Come Soft Rains," "The Pedestrian," The Author's Style | Short Story |
| | RL.9-10.2 | Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | | |
| | RL.9-10.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). | | |
| | RL.9-10.3 | Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme. | | |
| | SL.9-10.1 | Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. | | |
| | SL.9-10.1b | Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed. | | |
| | SL.9-10.3 | Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence. | | |
| L.9-10.5a | Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text. | | | |

Unit 2: (10 days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|--------------------|------------------|---|--|---------------------------------------|
| Unit 1: Nonfiction | RL.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | McDougall Littell Literature: "Dial Versu Digital;" "Once More to the Lake;" "A Letter from E. B. White, "Montgomery Boycott;" "A Eulogy to Dr. Martin Luther King, Jr." | Essay, letter, memoir, primary source |
| | RL.9-10.2 | Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | | |
| | RL.9-10.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). | | |

Unit 3: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------|-----------|-----------|-----------------|
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QUARTER 2

Unit 4: (20 days)

| Unit Focus | Standards | | Resources | Unit Vocabulary |
|------------|------------------|---|---|---|
| Poetry | RL.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | | blank verse, sonnet, stanza, couplet, quatrain, meter, simile |
| | RL.9-10.2 | Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | | |
| | RL.9-10.3 | Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme. | | |
| | RL.9-10.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). | | |
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| | | | McDougal Littell Literature: "Piano," "Those Winter Sundays;" "Sonnet 18," "Sonnet 30;" "Sweet Potato Pie;" "Salvador Late or Early;" Simile;" "Moon Rondeau;" "Woman;" "A Case of Cruelty;" Eight Puppies/Ocho Perritos" | |
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Unit 5: (20 days)

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| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------|------------------|---|---|
| Drama | RL.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | dialogue The Bear, by Anton Chekov |
| | RL.9-10.2 | Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | |
| | RL.9-10.3 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). | |
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QUARTER 3

Unit 6: (5 days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|------------------|---|--------------------------------|
| Reading for Information: Chronological Order; Analyzing a Letter; Career Search Report | RI.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | Time line; chronological order |
| | RI.9-10.2 | Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | |
| | RI.9-10.3 | Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them. | |
| | RI.9-10.4 | Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper). | |
| | W.9-10.1a | Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. | |
| | W.9-10.1b | Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence. | |

McDougall Littell

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QUARTER 4

Unit 9: (30 days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|-----------|--|--|
| Alice Walker author study; Writing the career research paper | RI.9-10.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | Life and Times, p. 499; "Everyday Use, p. 503; "Women," p. 516; "Poem at Thirty-nine," p. 518; Interview On Writing Poetry, p. 521; Essay from In Search of Our Mother's Gardens, p. 522; The Author's Style, p.528 Interview, essay; Internet research |
| | RI.9-10.2 | Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. | |
| | RI.9-10.3 | Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them. | |
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| | | Writing Workshop, p. 449; Internet; | |

Unit 10: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
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QUARTER 1

Unit 1: Short Stories (3 weeks)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|------------|---|-----------------|
| Students read, discuss, and analyze literary and nonfiction texts focusing on how central ideas develop and interact within a text. Students also explore the impact of authors' choices regarding how to develop and relate elements within a text. | RI.11-12.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. | |
| | RI.11-12.2 | Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. | |
| | RI.11-12.3 | Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). | |
| | RI.11-12.4 | Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines faction in Federalist No. 10). | |
| | RI.11-12.9 | Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical significance. | |
| | | https://www.engageny.org/resource/grade-11-ela-module-1 | |

Literature Analysis (3 weeks)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------|------------|---|-----------------|
| | RL.11-12.3 | Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). | |
| | RL.11-12.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) | |
| | RL.11-12.5 | Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact. | |
| | RL.11-12.6 | Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement). | |
| | RL.11-12.7 | Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.) | |

Unit 3: Unit 2: The Power of Persuasion, includes historical documents, sermons, articles, drama, and speeches (3 weeks)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------|-----------|--|-----------------|
| | W.11-12.7 | Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. | |
| | W.11-12.8 | Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. | |
| | W.11-12.9 | Draw evidence from literary or informational texts to support analysis, reflection, and research. | |

QUARTER 2

Unit 5: The Changing Face of America includes historical documents, essays, poetry, art, and biography

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|------------|---|---|
| Part 1: Women's Voices, Women's Lives; Part 2: The American Dream Illusion or Reality? | RI.11-12.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. | Imagery; metaphor; simile; stanza; rhyme scheme |
| | RI.11-12.2 | Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. | |
| | RI.11-12.3 | Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). | |
| | RI.11-12.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) | |
| | W.11-12.2 | Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. | |

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| | W.11-12.2a | Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. | | |
| | W.11-12.2b | Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. | | |
| | W.11-12.2c | Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. | | |
| | W.11-12.2d | Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. | | |
| | W.11-12.2e | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | | |
| | W.11-12.2f | Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic). | | |
| | W.11-12.7 | Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. | | |
| | SL.11-12.1 | Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. | | |
| | L.11-12.6 | Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. | | |
| | | | McDougall Littell Literature: Part 1 - "The Yellow Wallpaper;" "The Story of an Hour;" "Seventeen Syllable;" "Adolescence-III;" "I Stand Here Ironing;" "Ironing Their Clothes;" Assessment Practice: Comparing Literature. Part 2 - Historical Background; Poetry: "Chicago;" "Lucinda Matlock;" "Richard Cory;" "Miniver Cheevey;" "We Wear the Mask;" "Sympathy;" SHORT STORY: "Winter Dreams" HISTORICAL BACKGROUND: "America and I;" "The New Immigrants". Comparison and contrast essay, p. 902 | |

Unit 5: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
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QUARTER 3

Unit 6: An American Journey, includes drama, and film

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--------------------|-------------------|---|--|
| Play: The Crucible | RL.11-12.1 | | Dialogue; monologue; soliloquy; aside; antagonist; protagonist; tragedy; drama; Elements of Plot: exposition, rising action, climax, falling action, resolution; foil characters |
| | RL.11-12.2 | | |
| | RL.11-12.3 | | |
| | RL.11-12.4 | | |
| | RL.11-12.5 | | |
| | RL.11-12.6 | | |
| | RL.11-12.7 | McDougall Littell Literature: pp. 163-245; film version of The Crucible | |

Unit 7: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------------------|-------------------|-----------|---|
| "The Right to be Free" | RI.11-12.5 | | Reading vocabulary accompanies each selection |

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| | | Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses). | | |
|------------------------|-----------|--|-----------|--|
| | | Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics. | | |
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| | | | | "Speech in the Virginia Convention," Patrick Henry; "The Declaration of Independence," Thomas Jefferson; "Letter to Samson Occom," Phillis Wheatley; "Letter to John Adams," Abigail Adams; "What is an American?" de Crevecoeur. from Poor Richard's Almanac, Benjamin Franklin |
| Unit 8: (days) | | | | |
| Unit Focus | Standards | | Resources | Unit Vocabulary |
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QUARTER 4

| Unit 9: (days) | | | | |
|-----------------------------|--------------------|--|------------------------|--|
| Unit Focus | Standards | | Resources | Unit Vocabulary |
| Play Hamlet, by Shakespeare | RL.11-12.7 | Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.) | Hamlet, by Shakespeare | Reading vocabulary defined in the text |
| | W.11-12.1 | Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. | | |
| | W.11-12.1 a | Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence. | | |
| | W.11-12.1 b | Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases. | | |
| | W.11-12.1c | Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. | | |
| | W.11-12.1 d | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | | |
| | W.11-12.1 e | Provide a concluding statement or section that follows from and supports the argument presented. | | |
| | W.11-12.2 | Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. | | |
| | W.11-12.2 a | Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. | | |
| | W.11-12.2 b | Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. | | |
| | W.11-12.2c | Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. | | |
| | W.11-12.2 d | Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. | | |
| | W.11-12.2 e | Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. | | |

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QUARTER 1

Unit 1: (14 days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|---------------------------------|--|--|------------------------------------|--|
| Epic Poetry, Anglo Saxon Poetry | RL.11-12.1 | The Language of Literature textbook, Anglo-Saxon Web Quest | Epic, epic poetry, epic hero | |
| | | | | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. |
| | RL.11-12.2 | | | Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. |
| | RL.11-12.3 | | | Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). |
| | RL.11-12.4 | | | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) |
| | RL.11-12.5 | | | Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact. |
| | RL.11-12.7 | | | Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.) |
| | W.12.3 | | | Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. |
| W.12.3a | Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. | | | |
| Unit 2: (15 days) | | | | |
| Unit Focus | Standards | Resources | Unit Vocabulary | |
| Beowulf | RL.11-12.1 | The Language of Literature textbook, Study.com | Epic poem, kennings, stock epithet | |
| | | | | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. |
| | RL.11-12.2 | | | Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. |
| RL.11-12.3 | Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). | | | |

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| RL.11-12.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) |
| RL.11-12.5 | Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact. |
| RL.11-12.7 | Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.) |
| W.12.3b | Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. |

Unit 3 (15 Days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------------------|-----------|-----------------|---|
| Antigone, by Sophocles | RL.12.1 | Antigone script | Personification, figurative language, symbolism |
| | RL.12.2 | | |
| | RL.12.3 | | |
| | RL.12.4 | | |
| | RL.12.5 | | |
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QUARTER 2

Unit 4: (15 days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|------------|----------------------------|--------------------------------------|
| Antigone by Sophocles; Play Xtigone by Kelley; Chaucer and The Canterbury Tales | RL.11-12.1 | Script of play "Antigone;" | Personification, figurative language |

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| RL.11-12.2 | Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. | | |
| RL.11-12.3 | Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). | | |
| RL.11-12.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) | | |
| RL.11-12.5 | Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact. | | |
| W.12.1 | Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. | | |
| W.12.1b | Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases. | | |
| W.12.1c | Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. | | |
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Unit 5: (15 days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------------|------------|-----------|---|
| Canterbury Tales | RL.11-12.1 | | Frame Story, rhyme scheme, meter, irony |
| | RL.11-12.2 | | |

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| RL.11-12.3 | Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). |
| RL.11-12.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) |
| RL.11-12. | Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact. |
| W.12.1 | Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. |
| W.12.1b | Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases. |
| W.12.1c | Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. |

Background of Chaucer;
The Pardoner's Tale,
The Wife of Bath's Tale

QUARTER 3

Unit 6: (15 days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------|---|---|--|
| Poetry | <p>W.12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p> <p>W.12.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.</p> <p>W.12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</p> <p>RL.12.4 Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)</p> <p>RL.12.6 Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).</p> <p>SL.12.2 Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.</p> | <p>"My Lute, Awake!" "On Monsieur's Departure," "The Passionate Shepherd to His Love," "The Nymph's Reply to the Shepherd," "Sonnet 30," "Sonnet 75," "Sonnet 29," "Sonnet 116"</p> | <p>Sonnet, rhyme scheme, syntax, paraphrase, pastoral, Elizabethan Sonnet, Italian Sonnet, Petrarchan Sonnet, English Sonnet, Spenserian Sonnet,</p> |

Curriculum Map 2021-2022



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Unit 7: (20 days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|-----------|---|---|
| Studying themes in historical fiction. | RL.12.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. | Allusion, Imagery, additional reading vocab selected as needed. |
| | RL.12.2 | Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. | |
| | L.12.6 | Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. | |
| | SL.12.2 | Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. | |
| | | | |
| | | Things Fall Apart by Achebe | |

Schedule 7d: Curriculum

Mathematics

- DPSA Introduction Mathematics
- 9-12 Mathematics Pacing Guides with Standard Descriptions
- 9-12 Mathematics Curriculum Maps

Detroit Public Safety Academy



Mathematics Best Practice Framework

Mathematics Introduction

“In this changing world, those who understand mathematics will have significantly enhanced opportunities for shaping their futures. Mathematical competence opens doors to productive futures. All students should have the opportunity and the support necessary to learn significant mathematics with depth and understanding. “(NCTM 2000, p.50)

A best practice classroom defined by the National Council of Teachers of Mathematics. (2014). Principles to actions: Ensuring mathematical success for all. Reston, VA: Author incorporates the following 7 Effective Mathematics Teaching Practices:

- **Establish mathematics goals to focus learning.** Effective teaching of mathematics establishes clear goals for the mathematics that students are learning, situates goals within learning progressions, and uses the goals to guide instructional decisions.
- **Implement tasks that promote reasoning and problem solving.** Effective teaching of mathematics engages students in solving and discussing tasks that promote mathematical

reasoning and problem solving and allow multiple entry points and varied solution strategies.

- **Use and connect mathematical representations.** Effective teaching of mathematics engages students in making connections among mathematical representations to deepen understanding of mathematics concepts and procedures and as tools for problem solving.
- **Facilitate meaningful mathematical discourse.** Effective teaching of mathematics facilitates discourse among students to build shared understanding of mathematical ideas by analyzing and comparing student approaches and arguments.
- **Pose purposeful questions.** Effective teaching of mathematics uses purposeful questions to assess and advance students' reasoning and sense making about important mathematical ideas and relationships.
- **Build procedural fluency from conceptual understanding.** Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems.
- **Support productive struggle in learning mathematics.** Effective teaching of mathematics consistently provides students, individually and collectively, with opportunities and supports to engage in productive struggle as they grapple with mathematical ideas and relationships.
- **Elicit and use evidence of student thinking.** Effective teaching of mathematics uses evidence of student thinking to assess progress toward mathematical understanding and to adjust instruction continually in ways that support and extend learning.

A classroom that uses current research, follows district and state standards, and is student-centered, active, experiential, authentic, democratic, collaborative, rigorous and challenging.

Therefore, our Math Best Practice committee follows this recommendation of the NCTM and the Instruction Department for a theoretical framework that is student centered, and includes the cognitive and social aspects of learning. This document should be considered a Tier 1 level of delivery when considering the Response to Intervention Model.

- Student-centered learning is experimental, holistic, authentic, and challenging. This includes rich hands-on experiences, non-fiction writing, student choice, and student responsibility for learning.
- Cognitive principles are developmental, constructivist, expressive and reflective. This includes higher-order thinking, inquiry, and time for students to express their learning in a variety of ways.

- Social principles are collaborative and democratic. Classrooms need to be interactive and model real life community.

Within this framework, teachers will use The Learning-Focused Strategies Model. In this model a framework is provided for organizing the effective strategies you are already using as well as new strategies learned. The intent is to head towards giving less direction to the students, allowing them to identify tasks to be completed and processes to follow. Teachers will model for students, giving them time to practice with guidance and feedback. This will be followed by independent practice where strategies taught will be applied to problem solving activities. Although the same six qualities apply across all grades, you should not infer that each strand has equal weight or emphasis in every grade level. The four structures of best practices outlined are guidelines to be used to successfully implement a best practice classroom.

This document is organized in the following categories:

- **Qualities of Best Practice-Characteristics of quality mathematics instruction:** Making connections, using reasoning and explaining the process, problem solving, creating representations, communicating ideas, and assessment.
- **Structures of Best Practice-Implementing and organizing mathematics instruction:** Reflective assessment, grouping, tools, and environment.
- **Recommendations for implementation:** The steps and processes that need to be followed to implement Phase 1 and Phase 2.

Qualities of Best Practices in Mathematics

Mathematics is the science of patterns. It is the job of a best practice educator to pave the pathway in the students' discovery of these patterns and relationships. Our vision is a collaboration of expert mathematicians who use abstract, symbolic notations to describe the patterns they formulate. This mathematical community is an integral component in giving the students the advantage in problem solving. Teachers will provide the students an opportunity to learn from their failures and grow from their successes in a safe environment. This is accomplished through scaffolding, a gradual decrease of teacher support as students become more competent, modeling, and a demonstration of the skill or process. Students will be assessed using both formative and summative assessments which will be the platform for quality instruction including guided practice, small group instruction, and application tasks. Teachers

will be required to think outside of the box in preparing students for the world beyond their front door. This document describes the process and compilation of best practice research.

Making Connections

Students learn better when they are able to make connections. In math, students should make connections to build on prior knowledge and expand their understanding.

- **Prior Knowledge**

Students should practice making connections between new information learned and previous lessons, both from the current grade and the previous grade. Before teaching a new concept, teachers help students activate prior knowledge to show them how mathematical ideas build upon each other.

- Circle Maps/Brainstorming
- Tree Map/KWL (What I know, what I want to know, what I learned)

- **Real World (authentic) Ideas**

When students apply mathematical concepts to real world and student relevant situations it deepens their understanding and creates more meaning. Teachers need to select meaningful authentic problems appropriate for the students' knowledge base.

- For example, when teaching about area, you could ask the class to estimate how many feet of carpet it would take to carpet your classroom.
 - A link on how teachers can use real world ideas:
<http://www.youtube.com/watch?v=jRMVjHjYB6w>

- **Cross Curricular Lessons**

A single subject approach leaves students with a disconnected view of the knowledge and how to use that to solve real world problems. Students should be able to see how mathematics plays a role in other curriculum areas such as science, social studies, and art. Mathematics should be used frequently across the curriculum and the teachers need to incorporate cross-curricular lessons.

- Students can graph science results or books/genres read
- Students can use coordinate grids to find places on a map including places in a school.

- **The Purpose of the Lesson**

Students need to connect their learning to the purpose of the lesson to make it relevant. In other words, why am I learning this?

- Post the big ideas in the room
- Post the expectations in the room

Using Reasoning and Explaining the Process:

If problem solving is the focus of mathematics, reasoning is the logical thinking that helps us decide if and why our answer makes sense (Van De Wall, 2003). Not just memorizing an algorithm, but being able to explain and justify an answer shows that a student truly understands a concept. There needs to be a focus on the application of the math process to the world around us.

- **Model the Process**

While problem solving, teachers need to model their thought process to help students understand how to use reasoning in mathematical situations.

- **Application of Vocabulary**

It is critical that teachers demonstrate to students how to use appropriate vocabulary while communicating their reasoning process. Vocabulary should be an integral part of the math classroom.

- Word Walls
- Math Journaling and Prompts:
 - http://www.ilovemath.org/index.php?option=com_docman&task=cat_view&gid=23 –click on Journal Prompts
 - <http://myteacherpages.com/webpages/jgiffin/journal.cfm> click on 101 questions for math journals

- **The Use of Sample Literature**

Books can be used to introduce a concept, as a source for problems, to reinforce concepts, and to provide real world context.

- Literature based on topic:
http://childrenspicturebooks.info/articales/picture_books_for_math.htm

- **The Use of Properties and Formulas**

Students need to be able to understand how to use properties and formulas to justify steps in the problem solving process. Teachers need to model the use of these regularly in their lessons.

- Comparing answers when using the order of operations properly as opposed to not using it at all
- Use the actual term, associative property, when explaining the grouping in the following problem: $6+(4+9)=19$ and also $(6+4)+9=19$

- **The Use of Multiple Representations to Answer**

Students can articulate the connection between various approaches of relating to the same answer. This can also be executed by presenting a problem and allowing students to take a project approach for selecting their method of answering.

- 7×3 can be shown as $7+7+7$ or students could draw an array or three circles with seven dots in each.

- **The Use of Different Methods to Reach the Same Answer**

Students should understand that there is more than one way to solve a problem and to be able to determine which method is better suited for the problem.

- For multiplication the students could use the lattice, partial products, an the traditional method
- An example of the Lattice Method of Multiplication:
<http://www.youtube.com/watch?v=FnNvCuZ6SMw>
- A link to the Partial Product method:
<http://www.youtube.com/watch?v=LHgFZ4LqPvc&feature=relmfu>

- **The Use of Technology**

Students and teachers should be able to use various forms of technology to enhance understanding and reasoning. To assist students in explaining their reasoning, some technology pieces that could be used include: calculators, computers, interactive boards,

- Use the split screen or dual page on the interactive board to show two different representations or methods for solving one problem

- Virtual Manipulatives: <http://nlvm.usu.edu/en/nav/vlibrary.html>

Problem Solving

Students “build new mathematical knowledge through problem solving” (NCTM2000).

Teachers should be choosing meaningful problems or tasks where the solution is not obvious.

The student should be developing metacognition (the process of thinking about your own thinking). The student should be exposed and have the chance to use a variety of strategies, and be able to choose which strategy works best for them.

- **Authentic Problems**

Students should be given authentic, meaningful, real world problems. These problems won't always have obvious solutions or steps because the goal is to have students become patient, resourceful, problem solvers that persevere.

- Scholastic Authentic Math Problems:
<http://www.scholastic.com/teachers/collection/authentic-math-unit-plans>

- **Multiple Strategies**

Knowing students learn in a variety of ways, students need to be taught and given the chance to use different strategies depending on both the problem and the individual learner. Students need to be instructed at their appropriate rate and level.

- Everyday Math Multiple Strategies: <http://math.nyu.edu/~braams/links/emarith.html>

- **Brainstorming/Discovery**

Students need to be taught to use their prior knowledge to approach a new problem. Working to build independent learners, we need to present problems without the answer to let the students discover the solutions on their own. This can be done individually or in groups and may need to be structured to direct their attention.

- Activating prior knowledge:
<http://www.achievementstrategies.org/curriculum/C6d/Links/Teachingreadinginmathandsience6.pdf>

- **Scaffolding**

While students work through problems, they need scaffolding to provide clear directions, clarify the purpose and keep students on task. The amount of scaffolding should gradually decrease throughout the years to allow students to problem solve more independently.

- Scaffolding: <http://fcit.usf.edu/mathvids/strategies/si.html>

Creating Representations:

Symbols, charts, graphs, and diagrams are powerful methods for expressing mathematical ideas and relationships. Symbolism in mathematics, along with visual aids, such as charts and graphs, should be understood by students as methods of communicating mathematical ideas with other people. Symbols, graphs, charts, as well as physical manipulatives are also powerful learning tools. Moving from one representation to another is an important approach to add understanding. (Van De Wall).

- **Manipulatives**

The use of tangible items that gives students a tool for understanding that goes beyond paper and pencil. This allows students to see it, touch it, and move it to appeal to many different types of learners.

- Manipulatives: <http://www.youtube.com/watch?v=2Zss6mdkkRU>

- **Kinesthetic**

Bringing purposeful movement into the classroom will engage students by connecting physical movement to a concept.

- Math Dancing: http://www.youtube.com/watch?v=5_u_0J_btCc

- **Illustrations**

The use of pictures, diagrams, and graphs should be used interchangeably to represent mathematical ideas. Illustrations deepen understanding and are a valuable tool in the problem solving process.

- A variety of math representations:

<http://www.mathwire.com/seasonsonal/fall05.html#measurement>

- **List of Tables**

These can be utilized to aid in the organization of data which will help patterns be more easily recognized. The structures of these items need to be adjusted to fit the needs of the students.

- Different ways to graph weather:

http://www.nsa.gov/academia/_files/collected_learning/elementary/data_analysis/bar_graphing_with_weather.pdf

Graphic Organizers

Teachers need to help students use these tools, such as Thinking Maps, to organize their thoughts. They should assist students in selecting the best graphic organizer for the given problem.\

- Graphic Organizer of three ways to solve a problem:

<http://www.youtube.com/watch?v=VW-XpG6u3Dk>

- **Mnemonic Devices/Songs**

These are auditory tools used to help students retain information in a nontraditional manner. Including students in the creation adds additional value for the students.

- Counting by 2's, 5's, 10's song: <http://www.youtube.com/watch?v=GTyxfltyPgg>

- **Technology**

Teachers will incorporate technology in their daily instruction. For example, but not limited to: Calculators, Interactive boards, computers, videos, virtual manipulatives, online resources, wireless whiteboards, interactive tablets, iPods, iPads, Chromebooks, SMART Math Tools, and student response systems. Most classrooms are equipped with an Interactive board, teachers should be able to embrace the features available to enhance student learning. Teachers can use this technology to present videos, pre-recorded lessons, display scanned student work, use digital manipulatives, and easily use color for emphasis. The Interactive board is an engaging tool that allows for more interaction than a chalkboard/white board with activities like Koosh ball toss, click to reveal, shape creation and moving, dice rolling and dual screen writing.

Communicating Ideas:

Communication in the mathematics classroom is the key. Students should be able to talk about, write about, describe, and explain their mathematical thinking if they have a true, deep understanding of the given concepts.

- **Written**

To promote higher level thinking, writing should include more than the mathematical steps. It should also encompass the student's explanation, thought process, and reasoning while solving problems.

- Math Journals

- **Non-Written**

Students need to be provided the opportunity to discuss and/or debate, explain, and justify their thought process and approach to solving problems. In some cases pictorial representations may be the best means for students to convey their thoughts. This could be drawing pictures to model the situation, creating graphs, or using pictures to represent items within the problems.

- Math Journals
- Classroom or groups discussions

- **Learning Objectives/Standards**

These should be clearly conveyed in a student friendly language to provide a focus for their learning while still preserving the integrity of the information. Content vocabulary should be used for the objectives and throughout the class. Objectives should be presented to the students and posted where they can be referenced at the start, during and end of the unit.

- Math vocabulary posted
- Objectives posted
- Ticket out-students have to state math objective to leave the class

- **Color for Emphasis**

Color can be used in multiple approaches and has been shown in research to enhance learning. Colors can be used to highlight key information, show relationships and patterns, and separate information. Teaching students to use highlighters or colored pens during note taking is a useful skill.

- Highlight information in lessons and student notes
- Work or tests can be on colored paper
- Graphs and charts can be colored

- **Safe Environment**

Students need to feel comfortable sharing ideas, asking questions, and answering questions without fear of embarrassment.

- **Technology**

This is an essential tool for communicating mathematical ideas in the classroom.

- CPS: http://www.youtube.com/watch?v=15F10nWdmHQ&feature=grec_index
- Promethean Planet-<http://www.prometheanplanet.com/en-us/>
- Smart Board/Interactive Board Resource <http://exchange.smarttech.com/#tab=0>
- MobiMax: <https://www.mobymax.com/>
- Document cameras:
<http://www.youtube.com/watch?v=DKFQkzZm2ug&feature=related>

Assessment

Assessments are “vehicles for gathering information about students’ achievement” (Marzano 2000, p. 12). This information comes from two types of assessments: formative and summative. The purpose of formative assessment is to drive instruction by frequently checking for student understanding and progress throughout a unit. This allows the teacher to give adequate and

timely feedback to students. On the other hand, the purpose of summative assessment is to measure student achievement. Teachers utilize the results to modify instruction for the following school year. The distinct difference between these two vehicles is formative assessment guides immediate instruction while summative assessment allows for improvement from year to year.

The Structures of a Best Practice Classroom

Visualize a best practice math classroom. What does it look like, sound like, and feel like? Leona Group mathematics classrooms will have a non-threatening environment full of inquiry, alive with technology, and rich with writing. Our students will be actively involved in discussing, manipulating, and solving problems that connect to their world. Teachers will guide students to utilize the strategies and skills necessary to be competitive in the 21st century. The best practice teacher will also coach the students in making connections, learning through discovery, and “making mental manipulation(s) of abstract concepts” (Moyer, 2001, p. 176). Assessments will be made formatively and summatively to monitor the student’s true knowledge.

Grouping

A best practice classroom uses a variety of grouping methods to reach students. Please recognize that each method on its own is structurally sound, but none should be used exclusively.

- **Small Groups**

Students can be grouped depending on the intent. Homogenous groups allow the teacher to differentiate tasks or activities to meet the needs of the students. This form of grouping lets you present the same content in a manner that students will be able to understand and master. Heterogeneous groups promote students’ learning from each other. The students can be given a task and divide the work within the group based on each individual’s strengths. Grouping is a conscious and intentional process when effectively implemented.

- **Whole Group**

Teachers provide whole group instruction to present information and review or expand on content. This is an integral part of relaying information to the students, but be mindful of the lengths of instruction. Chunking material into manageable pieces for the students is very important. While presenting to the whole group, be aware that you should engage all students in the lesson.

- **Individual**

Some instruction is provided to students on a one-on-one basis. This is most often used to re-tech information that had previously been presented or to extend a student’s learning opportunity. In addition, students need time in the mathematics classroom to work independently to evaluate their own understanding with the opportunity to ask questions. The students would benefit from individual work time incorporated into whole group instruction time.

Tools

Classroom teachers have a variety of tools to use in educating their students. Some tools are used daily, while others are used less frequently to provide the best education. “Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools are helpful, recognizing both the insight to be gained and their limitations” (CCSS,2011,p. 17). While these innovative tools engage students, do not disregard the importance of students working with paper and pencil.

- **Technology**

Technology is a critical component in the mathematics classroom. Teachers and students are encouraged to use the interactive white board, including the SMART Math Tools, to make lessons more interactive and hands-on. Document cameras can be used to show student examples and model how to use manipulatives. Computers and tablets can also be used to enrich classroom instruction. Classroom Performance System (CPS) provides the opportunity to acquire instant feedback for student understanding.

- **Calculators**

To be competitive in the 21st century, our students are expected to use standard and graphing calculators. It is essential for students to understand and have the ability to use the various functions correctly. It is the teacher’s role to provide instruction on the proper usage of the calculator.

- **Manipulatives**

To help students make abstract concepts concrete, a variety of manipulatives can be used. Manipulatives have both visual and tactile appeal that engage the students and allow them to develop images that can be used to further understanding.

- **Math Journaling**

The practice of writing enhances the brain’s intake, processing, retaining, and retrieving of information (Zemelman, 2005). Using a math journal for written expression is encouraged. Through writing, students can increase their comfort with and success in understanding complex material, unfamiliar concepts, and subject-specific vocabulary. Writing boosts long-term memory, illuminates patterns, and gives the student time for reflection. Teachers use a non-fiction, constructed response type writing rubric to evaluate student writing.

- **Geometric Tools**

Compasses, protractors, reflective mirrors, rulers, and other similar tools help students understand mathematical concepts and should be used appropriately. Teachers will provide instruction for the proper use of these resources.

- **Use of Literature**

The use of literature in mathematics is a part of a cross curricular education. It helps to develop mathematical language and make math concepts relevant to real life.

Environment

An enriched environment provides clear objectives and is stimulating and full of energy. It feeds curiosity, is alive with resources, and is reflective of real life.

- **Physical Environment**

A well run classroom begins with the physical layout, including the arrangement of desks and the storage of materials and supplies. The desks should be arranged in a manner that is conducive to small group work and promotes student discussion. Supplies and manipulatives should be easily accessible to students with a clear expectation of procedures regarding usage of the materials and resources.

- **Engagement**

It is the teacher's responsibility to value and teach each student in his or her class by making learning interesting, meaningful and relevant. At the beginning of each lesson, the learning objective should be stated in a way that makes sense to students and helps them see the relevancy. A teacher should challenge students and allow them to learn from each other as well as from the teacher. Students should feel comfortable discussing the content and contributing to their learning. It is also important to build in the opportunity for each student to experience success. Learners of every level should feel valued.

- **Time**

The structure of the class should allow for instruction and practice. Time should be allocated in each school day to address and clarify student misconceptions regarding assignments. There should also be time built in at the end of each lesson for reflection to close the lesson and promote the retention of content.

Assessment

Formative and summative assessments have different goals. Any assessment could take either from depending on how it is used. Formative assessments are intended to drive daily instruction. Therefore, they should be used multiple times each week. These assessments are analyzed immediately, allowing teachers to gain deeper and more practical information about students' learning. Teachers use this knowledge to determine the content of future lessons, which provides opportunities for scaffolding and differentiation. Finally, the results of formative assessments give students specific feedback regarding their mathematical knowledge and understanding.

Summative assessments are created at the district level by developing questions aligned with the Common Core Standards. The results of these assessments are discussed and instructional strategies used by colleagues. These strategies are incorporated into all classrooms to improve student achievement.

Examples of Formative Assessment

- Weekly quizzes
- Teacher observations of students
- Homework and daily assignments
- Teacher questioning and student response
- Warm-up or bell work
- Student feedback-hands up, thumbs up/down, participation
- Mini quizzes/Ticket-out-the-door
- Student self-assessment

Examples of Summative Assessment

- State assessments
- District common assessments
- Unit or chapter tests



2021-22 Quarterly Pacing Guide

| High School | Algebra I CCSS | Q1 | Q2 | Q3 | Q4 |
|------------------|---|-----------|-------------|----|----|
| A-CED | Creating Equations | | | | |
| A-CED.A | Create equations that describe numbers or relationships. | | | | |
| A-CED.A.1 | Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions. | P (Eq) | P (Ineq) | | |
| A-CED.A.2 | Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. | | P | | |
| A-CED.A.3 | Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods. | | P | | |
| A-CED.A.4 | Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law $V = IR$ to highlight resistance R. | P | | | |
| S-ID | Interpreting Categorical and Quantitative Data | | | | |
| S-ID.A | Summarize, represent, and interpret data on a single count or measurement variable | | | | |
| S-ID.A.1 | Represent data with plots on the real number line (dot plots, histograms, and box plots). | | | | P |
| S-ID.A.2 | Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. | | | | P |
| S-ID.A.3 | Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). | | | | P |
| S-ID.B | Summarize, represent, and interpret data on two categorical and quantitative variables | | | | |
| S-ID.B.5 | Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal and conditional relative frequencies). Recognize possible associations and trends in the data. | | | | P |
| S-ID.B.6 | Represent data on two quantitative variables on a scatter plot and describe how the variables are related. | | | | P |

| | | | | | |
|-----------|---|------------------|----------------------------------|----------------------|-------------|
| S-ID.B.6a | Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models. | | | | P |
| S-ID.B.6b | Informally assess the fit of a model function by plotting and analyzing residuals. | | | | P |
| S-ID.B.6c | Fit a linear function for scatter plots that suggest a linear association. | | | | P |
| S-ID.C | Interpret linear models | | | | |
| S-ID.C.7 | Interpret the slope (rate of change) and the intercept (constant term) of a linear fit in the context of the data. | | P | | P |
| S-ID.C.8 | Compute (using technology) and interpret the correlation coefficient of a linear fit. | | | | P |
| S-ID.C.9 | Distinguish between correlation and causation. | | | | P |
| F-1F | Interpreting Functions | | | | |
| F-IF.A | Understand the concept of a function and use function notation. | | | | |
| F-IF.A.1 | Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x . The graph of f is the graph of the equation $y = f(x)$. | P | | | |
| F-IF.A.2 | Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. | P | | | |
| F-IF.A.3 | Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. For example, the Fibonacci sequence is defined recursively by $f(0) = f(1) = 1$, $f(n+1) = f(n) + f(n-1)$ for $n \geq 1$. | | P | | |
| F-IF.B | Interpret functions that arise in applications in terms of the context. | | | | |
| F-IF.B.4 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. | P (Linear eq) | P (Linear funct & ineq) | | P (Quad) |
| F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. | P (Linear eq) | P (Linear funct & ineq) | P (Exp & Poly) | P (Quad) |

| | | | | | |
|---------------|---|--|----------------------------------|----------------------|-------------|
| F-IF.B.6 | Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. | | P | | |
| F-IF.C | Analyze functions using different representations. | | | | |
| F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | | P (Linear funct & ineq) | P (Exp & Poly) | P (Quad) |
| F-IF.C.7a | Graph linear and quadratic functions and show intercepts, maxima, and minima. | | P (Linear funct & ineq) | | P (Quad) |
| F-IF.C.7c | Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. | | | P | |
| F-IF.C.7e | Graph exponential functions | | | P | |
| F-IF.C.8 | Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. | | | P | |
| F-IF.C.8a | Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. | | | | P |
| F-IF.C.8b | Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in functions such as $y = (1.2)t$, $y = (0.97)t$, $y = (1.1)12t$, $y = (1.2)t/10$, and classify them as representing exponential growth or decay. | | | P | |
| F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. | | P | P | P |
| F-BF | Building Functions | | | | |
| F-BF.A | Build a function that models a relationship between two quantities. | | | | |
| F-BF.A1 | Write a function that describes a relationship between two quantities. | | P | | |
| F-BF.A1.a | Determine an explicit expression, a recursive process, or steps for calculation from a context. | | P | | |
| F-BF.A2 | Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms. | | P | | |
| F-BF.B | Build new functions from existing functions. | | | | |

| | | | | | |
|-------------------|--|---------------|---------------|----------------------|-------------|
| F-BF.B3 | Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. | P | | P (Exp & Poly) | P (Quad) |
| F-LE | Functions: Linear, Quadratic and Exponential Models | | | | |
| F-LE.A | Construct and compare linear, quadratic, and exponential models and solve problems. | | | | |
| F-LE.A1 | Distinguish between situations that can be modeled with linear functions and with exponential functions. | | | P | |
| F-LE.A1.a | Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. | | P (Linear) | P (Exp) | |
| F-LE.A1.b | Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. | | P | | |
| F-LE.A1.c | Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. | | | P | |
| F-LE.A2 | Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table). | | P (Linear) | P (Exp) | |
| F-LE.A3 | Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. | | | P | |
| F-LE.B | Interpret expressions for functions in terms of the situation they model. | | | | |
| F-LE.B5 | Interpret the parameters in a linear or exponential function in terms of a context. | | P (Linear) | P (Exp) | |
| A-SSE | Seeing Structure in Expressions | | | | |
| A-SSE.A | Interpret the structure of expressions. | | | | |
| A-SSE.A.1 | Interpret expressions that represent a quantity in terms of its context. | P (Linear) | P (Linear) | P (Exp) | |
| A-SSE.A.1a | Interpret parts of an expression, such as terms, factors, and coefficients. | P | | P | |
| A-SSE.A.1b | Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret $P(1+r)^n$ as the product of P and a factor not depending on P. | | | P | |

| | | | | | |
|-------------------|--|------------------|----------------------------------|----------------------|-------------|
| A-SSE.A.2 | Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$. | P | | P | P |
| A-SSE.B | Write expressions in equivalent forms to solve problems. | | | | |
| A-SSE.B.3 | Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. | | P | P | P |
| A-SSE.B.3a | Factor a quadratic expression to reveal the zeros of the function it defines. | | | | P |
| A-SSE.B.3b | Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. | | | | P |
| A-SSE.B.3c | Use the properties of exponents to transform expressions for exponential functions. For example the expression $1.15t$ can be rewritten as $(1.151/12)^{12t} \approx 1.12^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%. | | | P | |
| A-APR | Arithmetic with Polynomials and Rational Expressions | | | | |
| A-APR.A | Perform arithmetic operations on polynomials | | | | |
| A-APR.A1 | Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. | P | | P | |
| A-APR.B | Understand the relationship between zeros and factors of polynomials | | | | |
| A-APR.B3 | Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. | | | | P |
| A-APR.C | Use polynomial identities to solve problems | | | | |
| A-APR.C5 | . (+) Know and apply the Binomial Theorem for the expansion of $(x + y)^n$ in powers of x and y for a positive integer n , where x and y are any numbers, with coefficients determined for example by Pascal's Triangle.1 | | | P | |
| A-REI | Reasoning with Equations and Inequalities | | | | |
| A-REI.A | Understand solving equations as a process of reasoning and explain the reasoning | | | | |
| A-REI.A1 | Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. | P (Linear eq) | P (Linear funct & ineq) | P (Exp & Poly) | P (Quad) |
| A-REI.B | Solve equations and inequalities in one variable | | | | |

| | | | | | |
|------------|---|---|---|---|---|
| A-REI.B3 | Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. | P | P | | |
| A-REI.B4 | Solve quadratic equations in one variable. | | | | P |
| A-REI.B4.A | Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form. | | | | P |
| A-REI.B4.B | Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b . | | | | P |
| A-REI.C | Solve systems of equations | | | | |
| A-REI.C5 | Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. | | | | P |
| A-REI.C6 | Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. | | | | P |
| A-REI.C7 | Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$. | | | | P |
| A-REI.D | Represent and solve equations and inequalities graphically | | | | |
| A-REI.D10 | Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). | | P | P | |
| A-REI.D11 | Explain why the x -coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.★ | | | P | |
| A-REI.D12 | Graph the solutions to a linear inequality in two variables as a halfplane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. | | P | P | |
| N | The Real Number System | | | | |
| N-RN.A | Extend the properties of exponents to rational exponents. | | | | |

| | | | | | | |
|------------------|--|--------------------------|-----------|-----------|-----------|-----------|
| N-RN.A1 | Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5(1/3)^3$ to hold, so $(5^{1/3})^3$ must equal 5 | | | P | | |
| N-RN.A2 | Rewrite expressions involving radicals and rational exponents using the properties of exponents. | | | P | | |
| N-RN.B | Use properties of rational and irrational numbers. | | | | | |
| N-RN.B3 | Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational. | P | | | | |
| N-Q | Quantities | | | | | |
| N-Q.A | Reason quantitatively and use units to solve problems. | | | | | |
| N-Q.A1 | Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. | P | | | | |
| N-Q.A2 | Define appropriate quantities for the purpose of descriptive modeling. | P | | | | |
| N-Q.A3 | Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. | P | | | | |
| G-GPE | Expressing Geometric Properties with Equations | | | | | |
| G-GPE.B | Use coordinates to prove simple geometric theorems algebraically | | | | | |
| G-GPE.B.5 | Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point). | | P | | | |
| | | New Standards: | 17 | 19 | 14 | 21 |
| | | Review Standards: | | 6 | 14 | 9 |



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| High School | Geometry CCSS | Q1 | Q2 | Q3 | Q4 |
|---------------|--|----|----|----|----|
| G-C | Circles | | | | |
| G-C.A | Understand and apply theorems about circles | | | | |
| G-C.A.1 | Prove that all circles are similar. | | | P | |
| G-C.A.2 | Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle. | | | P | |
| G-C.A.3 | Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle. | | | P | |
| G-C.A.4 | (+) Construct a tangent line from a point outside a given circle to the circle. | | | P | |
| G-C.B | Find arc lengths and areas of sectors of circles | | | | |
| G-C.B.5 | Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector. | | | P | |
| G-CO | Congruence | | | | |
| G-CO.A | Experiment with transformations in the plane | | | | |
| G-CO.A.1 | Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. | P | | | |
| G-CO.A.2 | Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). | P | | | |
| G-CO.A.3 | Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself. | P | | | |
| G-CO.A.4 | Develop definitions of rotations, reflections and translations in terms of angles, circles, perpendicular lines, parallel lines and line segments. | P | | | |



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| High School | Geometry CCSS | Q1 | Q2 | Q3 | Q4 |
|---------------|--|----|----|----|----|
| G-CO.A.5 | Given a geometric figure and a rotation, reflection or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another. | P | | | |
| G-CO.B | Understand congruence in terms of rigid motions | | | | |
| G-CO.B.6 | Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. | | P | | |
| G-CO.B.7 | Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. | | P | | |
| G-CO.B.8 | Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions. | | P | | |
| G-CO.C | Prove geometric theorems | | | | |
| G-CO.C.9 | Prove theorems about lines and angles. Theorems include vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints, | P | | | |
| G-CO.C.10 | Prove theorems about triangles. Theorems include measures of interior angles of a triangle sum to 180° ; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point. | P | P | P | |
| G-CO.C.11 | Prove theorems about parallelograms. Theorems include opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals. | | | P | |
| G-CO.D | Make geometric constructions | | | | |



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| High School | Geometry CCSS | Q1 | Q2 | Q3 | Q4 |
|-------------------|---|----|----|----|----|
| G-CO.D.12 | Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line. | P | | | |
| G-CO.D.13 | Construct an equilateral triangle, a square and a regular hexagon inscribed in a circle. | P | | | |
| G-SRT | Similarity, Right Triangles, and Trigonometry | | | | |
| G-SRT.A | Understand similarity in terms of similarity transformations | | | | |
| G-SRT.A.1 | Verify experimentally the properties of dilations given by a center and a scale factor: | P | | | |
| G-SRT.A.1a | A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged. | P | | | |
| G-SRT.A.1b | The dilation of a line segment is longer or shorter in the ratio given by the scale factor | P | | | |
| G-SRT.A.2 | Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides. | | P | | |
| G-SRT.A.3 | Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar. | | P | | |
| G-SRT.B | Prove theorems involving similarity | | | | |
| G-SRT.B.4 | Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity | | P | | |
| G-SRT.B.5 | Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures. | | P | | |
| G-SRT.C | Define trigonometric ratios and solve problems involving right triangles | | | | |
| G-SRT.C.6 | Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles. | | P | | |
| G-SRT.C.7 | Explain and use the relationship between the sine and cosine of complementary angles. | | P | | |



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| High School | Geometry CCSS | Q1 | Q2 | Q3 | Q4 |
|-------------------|---|----|----|----|----|
| G-SRT.C.8 | Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. ★ | | P | | |
| G-SRT.D | Apply trigonometry to general triangles | | | | |
| G-SRT.D.9 | (+) Derive the formula $A = 1/2 ab \sin(C)$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side . | | | P | |
| G-SRT.D.10 | (+) Prove the Laws of Sines and Cosines and use them to solve problems. | | | P | |
| G.SRT.D.11 | (+) Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces). | | | P | |
| G-GMD | Geometric Measurement and Dimension | | | | |
| G-GMD.A | Explain volume formulas and use them to solve problems | | | | |
| G-GMD.A.1 | Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments. | | | P | P |
| G-GMD.A.2 | (+) Give an informal argument using Cavalieri's principle for the formulas for the volume of a sphere and other solid figures. | | | | P |
| G-GMD.A.3 | Use volume formulas for cylinders, pyramids, cones and spheres to solve problems. | | | | P |
| G-GMD.B | Visualize relationships between two-dimensional and three-dimensional objects | | | | |
| G-GMD.B.4 | Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects. | | | | P |
| G-GPE | Expressing Geometric Properties with Equations | | | | |
| G-GPE.A | Translate between the geometric description and the equation for a conic section | | | | |
| G-GPE.A.1 | Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation. | | | P | |
| G-GPE.A.2 | Derive the equation of a parabola given a focus and directrix. | | | P | |
| G-GPE.B | Use coordinates to prove simple geometric theorems algebraically | | | | |



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| High School | Geometry CCSS | Q1 | Q2 | Q3 | Q4 |
|---------------|--|----|----|----|----|
| G-GPE.B.4 | Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$ | | | P | |
| G-GPE.B.5 | Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point). | P | | | |
| G-GPE.B.6 | Find the point on a directed line segment between two given points that partitions the segment in a given ratio. | P | | | |
| G-GPE.B.7 | Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.★ | P | | P | |
| G-MG | Modeling with Geometry | | | | |
| G-MG.A | Apply geometric concepts in modeling situations | | | | |
| G-MG.A.1 | Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).★ | | | | P |
| G-MG.A.2 | Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).★ | | | | P |
| G-MG.A.3 | Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).★ | | | | P |
| S.CP | Statistics and Probability: Conditional Probability and the Rules of Probability | | | | |
| S.CP.A | Understand independence and conditional probability and use them to interpret data | | | | |
| S.CP.A1 | Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not"). | | | | P |
| S.CP.A2 | Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent. | | | | P |



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| High School | Geometry CCSS | Q1 | Q2 | Q3 | Q4 |
|-------------|--|----|----|----|----|
| S.CP.A3 | Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B. | | | | P |
| S.CP.A4 | Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results. | | | | P |
| S.CP.A5 | Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer. | | | | P |
| S.CP.B | Use the rules of probability to compute probabilities of compound events. | | | | |
| S.CP.B6 | Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model. | | | | P |
| S.CP.B7 | Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model. | | | | P |
| S.CP.B8 | (+) Apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B) = P(A)P(B A) = P(B)P(A B)$, and interpret the answer in terms of the model. | | | | P |
| S.CP.B9 | (+) Use permutations and combinations to compute probabilities of compound events and solve problems. | | | | P |
| S.MD | Statistics and Probability: Using Probability to Make Decisions | | | | |
| S.MD.B | Use probability to evaluate outcomes of decisions | | | | |
| S.MD.B6 | (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). | | | | P |



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| High School | Geometry CCSS | Q1 | Q2 | Q3 | Q4 |
|-------------|---|----|----|----|----|
| S.MD.B7 | (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game). | | | | P |
| | New Standards: | 15 | 10 | 13 | 17 |
| | Review Standards: | | 1 | 2 | 1 |



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| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|------------------|---|-------------------------|---------------------------|----|----|
| A-CED | Creating Equations | | | | |
| A-CED.A | Create equations that describe numbers or relationships. | | | | |
| A-CED.A.1 | Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and <u>quadratic functions</u>, and <u>simple rational and exponential functions</u>. **** | P | | | |
| A-CED.A.2 | Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. | P (Linear / Quad) | P (Poly / Rational) | | |
| A-CED.A.3 | Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods. | P (Linear / Quad) | P (Poly / Rational) | | |
| A-CED.A.4 | Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law $V = IR$ to highlight resistance R. | | P | | |
| S-ID | Interpreting Categorical and Quantitative Data | | | | |
| S-ID.A | Summarize, represent, and interpret data on a single count or measurement variable | | | | |
| S-ID.A.1 | Represent data with plots on the real number line (dot plots, histograms, and box plots). | | | | P |
| S-ID.A.2 | Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. **** | | | | P |
| S-ID.A.3 | Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).**** | | | | P |
| S-ID.A.4 | Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets and tables to estimate areas under the normal curve. | | | | P |
| S-ID.B | Summarize, represent, and interpret data on two categorical and quantitative variables | | | | |



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| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|---------------|--|----|----|----|----|
| S-ID.B.5 | Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal and conditional relative frequencies). Recognize possible associations and trends in the data. | | | | P |
| S-ID.B.6 | Represent data on two quantitative variables on a scatter plot and describe how the variables are related. | | | | P |
| S-ID.B.6a | Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models. **** | | | | P |
| S-ID.B.6b | Informally assess the fit of a model function by plotting and analyzing residuals. **** | | | | P |
| S-ID.B.6c | Fit a linear function for scatter plots that suggest a linear association. **** | | | | P |
| S-ID.C | Interpret linear models | | | | |
| S-ID.C.7 | Interpret the slope (rate of change) and the intercept (constant term) of a linear fit in the context of the data. **** | | | | P |
| S-ID.C.8 | Compute (using technology) and interpret the correlation coefficient of a linear fit. **** | | | | P |
| S-ID.C.9 | Distinguish between correlation and causation. **** | | | | P |
| S-CP | Conditional Probability and the rules of probability | | | | |
| S-CP.A | Understand independence and conditional probability and use them to interpret data | | | | |
| S-CP.A.1 | Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (“or,” “and,” “not”). | | | | P |
| S-CP.A.2 | Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent. | | | | P |
| S-CP.A.3 | Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B. | | | | P |



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| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|---------------|--|----|----|----|----|
| S-CP.A.4 | Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results. | | | | P |
| S-CP.A.5 | Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer. | | | | P |
| S-CP.B | Use the rules of probability to compute probabilities of compound events in a uniform probability model | | | | |
| S-CP.B.6 | Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model. | | | | P |
| S-CP.B.7 | Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model. | | | | P |
| S-CP.B.8 | (+) Apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B) = P(A)P(B A) = P(B)P(A B)$, and interpret the answer in terms of the model. | | | | P |
| S-CP.B.9 | (+) Use permutations and combinations to compute probabilities of compound events and solve problems. | | | | P |
| S-MD | Using Probability to Make Decisions | | | | |
| S-MD.A | Calculate expected values and use them to solve problems | | | | |
| S-MD.A.1 | (+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions. | | | | P |
| S-MD.A.2 | (+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution. | | | | P |



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| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|-------------|---|----|----|----|----|
| S-MD.A.3 | (+) Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. For example, find the theoretical probability distribution for the number of correct answers obtained by guessing on all five questions of a multiple-choice test where each question has four choices, and find the expected grade under various grading schemes. | | | | P |
| S-MD.A.4 | (+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. For example, find a current data distribution on the number of TV sets per household in the United States, and calculate the expected number of sets per household. How many TV sets would you expect to find in 100 randomly selected households? | | | | P |
| S-MD.B | Use probability to evaluate outcomes of decisions | | | | |
| S-MD.B.5 | (+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values. | | | | P |
| S-MD.B.5a | Find the expected payoff for a game of chance. For example, find the expected winnings from a state lottery ticket or a game at a fastfood restaurant. | | | | P |
| S-MD.B.5b | Evaluate and compare strategies on the basis of expected values. For example, compare a high-deductible versus a low-deductible automobile insurance policy using various, but reasonable, chances of having a minor or a major accident. | | | | P |
| S-MD.B.6 | (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). | | | | P |
| S-MD.B.7 | (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game). | | | | P |
| S-IC | Statistics and Probability: Making Inferences and Justifying Conclusions | | | | |
| S-IC-.A | Understand and evaluate random processes underlying statistical experiments | | | | |
| S-IC.A1 | Understand statistics as a process for making inferences about population parameters based on a random sample from that population. | | | | P |



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| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|-----------------|--|-------------------------|---------------------------|------------------------|----|
| S-IC.A2 | Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model? | | | | P |
| S-IC-.B | Make inferences and justify conclusions from sample surveys, experiments, and observational studies | | | | |
| S-IC.B3 | Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each. | | | | P |
| S-IC.B4 | Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling. | | | | P |
| S-IC.B5 | Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant. | | | | P |
| S-IC.B6 | Evaluate reports based on data. | | | | P |
| F-1F | Interpreting Functions | | | | |
| F-IF.A | Understand the concept of a function and use function notation. | | | | |
| F-IF.A.3 | Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. For example, the Fibonacci sequence is defined recursively by $f(0) = f(1) = 1$, $f(n+1) = f(n) + f(n-1)$ for $n \geq 1$. | | P | | |
| F-IF.B | Interpret functions that arise in applications in terms of the context. | | | | |
| F-IF.B.4 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. | P (Linear / Quad) | P (Poly / Rational) | P (Radial / Exp) | |
| F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. | P (Linear / Quad) | P (Poly / Rational) | P (Radial / Exp) | |



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| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|-------------|--|-------------------------|---------------------------|------------------------|----|
| F-IF.B.6 | Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. | P (Linear / Quad) | P (Poly / Rational) | P (Radial / Exp) | |
| F-IF.C | Analyze functions using different representations. | | | | |
| F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | P (Linear / Quad) | P (Poly / Rational) | P (Radial / Exp) | |
| F-IF.C.7a | Graph linear and quadratic functions and show intercepts, <u>maxima, and minima.</u> **** | P | | | |
| F-IF.C.7b | Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. | | | P | |
| F-IF.C.7c | Graph polynomial functions, <u>identifying zeros when suitable factorizations are available, and showing end behavior.</u> | | P | | |
| F-IF.C.7d | Graph rational functions, <u>identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior.</u> | | P | | |
| F-IF.C.7e | Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. | | | P | |
| F-IF.C.8 | Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. | P (Linear / Quad) | P (Poly / Rational) | P (Radial / Exp) | |
| F-IF.C.8a | Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. | P | | | |
| F-IF.C.8b | Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in functions such as $y = (1.2)^t$, $y = (0.97)^t$, $y = (1.1)^{12t}$, $y = (1.2)^t/10$, and classify them as representing exponential growth or decay. | | | P | |
| F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. | P (Linear / Quad) | P (Poly / Rational) | P (Radial / Exp) | |



2021-22 Quarterly Pacing Guide

| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|-------------------|---|-------------------------|-----------------|----------------|----|
| F-BF | Building Functions | | | | |
| F-BF.A | Build a function that models a relationship between two quantities. | | | | |
| F-BF.A1.b | Combine standard function types using arithmetic operations. For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model. | | | P | |
| F-BF.B | Build new functions from existing functions. | | | | |
| F-BF.B.3 | Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. | P (Linear / Quad) | P (Rational) | P (Radical) | |
| F-BF.B.4 | Find inverse functions. | | P (Rational) | P (Radical) | |
| F-BF.B.4.a | Solve an equation of the form $f(x) = c$ for a simple function f that has an inverse and write an expression for the inverse. For example, $f(x) = 2x^3$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$. | | P (Rational) | P (Radical) | |
| F-LE | Functions: Linear, Quadratic and Exponential Models | | | | |
| F-LE.A | Construct and compare linear, quadratic, and exponential models and solve problems. | | | | |
| F-LE.A4 | For exponential models, express as a logarithm the solution to $abct = d$ where a , c , and d are numbers and the base b is 2, 10, or e ; evaluate the logarithm using technology. | | | P | |
| F-LE.B | Interpret expressions for functions in terms of the situation they model. | | | | |
| F-LE.B5 | Interpret the parameters in a linear or exponential function in terms of a context. | P (Linear) | | P (Exp) | |
| F-TF | Trigonometric Functions | | | | |
| F-TF.A | Extend the domain of trigonometric functions using the unit circle. | | | | |
| F-TF.A1 | Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle. | | | | P |



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| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|------------------|---|----|----|----|----|
| F-TF.A2 | Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle. | | | | P |
| F-TF.B | Model periodic phenomena with trigonometric functions. | | | | |
| F-TF.B5 | Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline. | | | | P |
| F-TF.C | Prove and apply trigonometric identities. | | | | |
| F-TF.C8 | Prove the Pythagorean identity $\sin^2(\theta) + \cos^2(\theta) = 1$ and use it to find $\sin(\theta)$, $\cos(\theta)$, or $\tan(\theta)$ given $\sin(\theta)$, $\cos(\theta)$, or $\tan(\theta)$ and the quadrant of the angle. | | | | P |
| A-SSE | Seeing Structure in Expressions | | | | |
| A-SSE.A | Interpret the structure of expressions. | | | | |
| A-SSE.A.2 | Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$. **** | P | P | | |
| A-SSE.B | Write expressions in equivalent forms to solve problems. | | | | |
| A-SSE.B.3 | Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. **** | P | | P | |
| A-SSE.B.3a | Factor a quadratic expression to reveal the zeros of the function it defines. **** | P | | | |
| A-SSE.B.3b | Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. | P | | | |
| A-SSE.B.4 | Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems. For example, calculate mortgage payments. | | P | P | |
| A-APR | Arithmetic with Polynomials and Rational Expressions | | | | |
| A-APR.A | Perform arithmetic operations on polynomials | | | | |



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| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|-------------|--|----|----|----|----|
| A-APR.1 | Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. | | P | | |
| A-APR.B | Understand the relationship between zeros and factors of polynomials | | | | |
| A-APR.B2 | Know and apply the Remainder Theorem: For a polynomial $p(x)$ and a number a , the remainder on division by $x - a$ is $p(a)$, so $p(a) = 0$ if and only if $(x - a)$ is a factor of $p(x)$. | | P | | |
| A-APR.B3 | Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. | | P | | |
| A-APR.C | Use polynomial identities to solve problems | | | | |
| A-APR.C.4 | Prove polynomial identities and use them to describe numerical relationships. For example, the polynomial identity $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ can be used to generate Pythagorean triples. | | P | | |
| A-APR.C.5 | . (+) Know and apply the Binomial Theorem for the expansion of $(x + y)^n$ in powers of x and y for a positive integer n , where x and y are any numbers, with coefficients determined for example by Pascal's Triangle.1 | | P | | |
| A-APR.D | Use polynomial identities to solve problems | | | | |
| A-APR.D.6 | Rewrite simple rational expressions in different forms; write $a(x)/b(x)$ in the form $q(x) + r(x)/b(x)$, where $a(x)$, $b(x)$, $q(x)$, and $r(x)$ are polynomials with the degree of $r(x)$ less than the degree of $b(x)$, using inspection, long division, or, for the more complicated examples, a computer algebra system. | | P | | |
| A-APR.D.7 | (+) Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions. | | P | | |
| A-REI | Reasoning with Equations and Inequalities | | | | |
| A-REI.A | Understand solving equations as a process of reasoning and explain the reasoning | | | | |
| A-REI.A2 | Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.**** | | | P | |
| A-REI.B | Solve equations and inequalities in one variable | | | | |



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| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|----------------|--|-------------------------|---------------------------|------------------------|----|
| A-REI.B3 | Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. | P | | | |
| A-REI.B4 | Solve quadratic equations in one variable.**** | P | | | |
| A-REI.B4.A | Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.**** | P | | | |
| A-REI.B4.B | Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b . | P | | | |
| A-REI.C | Solve systems of equations | | | | |
| A-REI.C5 | Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. | P | | | |
| A-REI.C6 | Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. | P | | | |
| A-REI.C7 | Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$. **** | P | | | |
| A-REI.C8 | . (+) Represent a system of linear equations as a single matrix equation in a vector variable. | | | | P |
| A-REI.C9 | (+) Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension 3×3 or greater). | | | | P |
| A-REI.D | Represent and solve equations and inequalities graphically | | | | |
| A-REI.D10 | Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). | P (Linear / Quad) | P (Poly / Rational) | P (Radial / Exp) | |



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| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|------------------|---|-------------------------|---------------------------|------------------------|----|
| A-REI.D11 | Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.★ | P (Linear / Quad) | P (Poly / Rational) | P (Radial / Exp) | |
| N | Number and Quantity | | | | |
| N-RN | The Real Number System | | | | |
| N-RN.1 | Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5(1/3)^3$ to hold, so $(5^{1/3})^3$ must equal 5 | | | P | |
| N-RN.2 | Rewrite expressions involving radicals and rational exponents using the properties of exponents. | | | P | |
| N-RN.3 | Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational. | | | P | |
| N-VM | Vector and Matrix Quantities | | | | |
| N-VM.6 | (+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network. | | | | P |
| N-VM.7 | (+) Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled. | | | | P |
| N-VM.8 | (+) Add, subtract, and multiply matrices of appropriate dimensions | | | | P |
| N-VM.9 | (+) Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties. | | | | P |
| N-VM.10 | (+) Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse. | | | | P |



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| High School | Algebra II CCSS | Q1 | Q2 | Q3 | Q4 |
|---------------|--|----|----|----|----|
| N-VM.11 | (+) Multiply a vector (regarded as a matrix with one column) by a matrix of suitable dimensions to produce another vector. Work with matrices as transformations of vectors. | | | | P |
| N-VM.12 | (+) Work with 2×2 matrices as transformations of the plane, and interpret the absolute value of the determinant in terms of area. | | | | P |
| N-CN | The Complex Number System | | | | |
| N-CN.A | Perform arithmetic operations with complex numbers. | | | | |
| N-CN.A1 | Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real. | P | P | | |
| N-CN.A2 | Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers. | P | P | | |
| N-CN.A3 | (+) Find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers. | | P | | |
| N-CN.C | Use complex numbers in polynomial identities and equations. | | | | |
| N-CN.C7 | Solve quadratic equations with real coefficients that have complex solutions. | P | | | |
| N-CN.C8 | (+) Extend polynomial identities to the complex numbers. For example, rewrite $x^2 + 4$ as $(x + 2i)(x - 2i)$. | P | P | | |
| N-CN.C9 | (+) Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials. | P | P | | |
| | New Standards: | 32 | 15 | 9 | 49 |
| | Review Standards: | | 14 | 16 | |

Standards Denoted "****" are review standards from Algebra 1. Any standard that has part of it underlined it is expected that specific part of the standard is covered in Alg. 2 and the rest was in Alg. 1. Any standard that does not have a "P" or "I" for any of the quarters, it is assumed that student have mastered it in Algebra 1. RtI, MTSS, Scaffolding would be used to cover those.

Algebra 1 Curriculum Map 2021-22

QUARTER 1

Unit 1: Introduction to Algebra (10 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|---|--|---|
| <ul style="list-style-type: none"> - Introduction to Algebra - Rational & irrational numbers - Simple polynomial multiplication, addition, and subtraction - Write expressions from word problems | A-SSE.A.1 | Interpret expressions that represent a quantity in terms of its context. | <ul style="list-style-type: none"> - Expression - Equation - Variable - Term - Coefficient - Exponent - Factor - Rational Number - Irrational Number - Commutative Property - Associative Property - Distributive Property - Distribute - Monomial - Binomial - Trinomial - Polynomial |
| | A-SSE.A.1a | Interpret parts of an expression, such as terms, factors, and coefficients. | |
| | A-SSE.A.2 | Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$. | |
| | A-APR.A1 | Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. | |
| | N-RN.B3 | Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational. | |
| | N-Q.A1 | Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. | |
| N-Q.A2 | Define appropriate quantities for the purpose of descriptive modeling. | | |
| N-Q.A3 | Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. | | |

Unit 2: Linear Equations (18 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|------------------|--|---|
| <ul style="list-style-type: none"> - Write and solve linear equations - Justify the steps for solving equations | A-CED.A.1 | Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions. | <ul style="list-style-type: none"> - Constant - Coefficient - Proportion |
| | A-CED.A.4 | Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law $V = IR$ to highlight resistance R. | |
| | A-REI.A1 | Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. | |
| | A-REI.B3 | Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. | |

Unit 3: Functions (11 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|-----------------|---|--|
| <ul style="list-style-type: none"> - What is a function? - Function notation - Domain and Range - Function families - Shifting parent function graphs | F-IF.A.1 | Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. The graph of f is the graph of the equation $y = f(x)$. | <ul style="list-style-type: none"> - eMathInstruction: https://emathinstruction.com/common-core-algebra-i/unit-3-functions/ - |
| | F-IF.A.2 | Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. | |

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| F-BF.B3 | Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. | <ul style="list-style-type: none"> - Relation - Minimum - Maximum - Zero / Root - Linear function - Quadratic function - Step function - Absolute value function - Exponential function - Polynomial function - Parent function |
| F-IF.B.4 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. | |
| F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. | |

QUARTER 2

Unit 4: Linear Functions (27 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|---|---|---|
| <ul style="list-style-type: none"> - Arithmetic sequences - Find the slope of a line - Write linear equations (slope-intercept form, point-slope form) - Parallel and perpendicular lines | A-CED.A.2 | Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. | <ul style="list-style-type: none"> - Slope - Rate of Change - y-intercept - Slope-intercept form - Point-slope form - Solution - Arithmetic sequence - Recursive formula - Explicit formula - Parallel lines - Perpendicular lines |
| | F-IF.A.3 | Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. For example, the Fibonacci sequence is defined recursively by $f(0) = f(1) = 1$, $f(n+1) = f(n) + f(n-1)$ for $n \geq 1$. | |
| | F-IF.B.4 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. | |
| | F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. | |
| | F-IF.B.6 | Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. | |
| | F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | |
| | F-IF.C.7a | Graph linear and quadratic functions and show intercepts, maxima, and minima. | |
| | F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. | |
| | F-BF.A1 | Write a function that describes a relationship between two quantities. | |
| | F-BF.A1.a | Determine an explicit expression, a recursive process, or steps for calculation from a context. | |
| | F-BF.A2 | Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms. | |
| F-LE.A1.a | Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. | | |

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| | F-LE.A1.b | Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. | | |
| | F-LE.A2 | Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table). | | |
| | F-LE.B5 | Interpret the parameters in a linear or exponential function in terms of a context. | | |
| | A-SSE.A.1 | Interpret expressions that represent a quantity in terms of its context. | | |
| | A-SSE.B.3 | Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. | | |
| | A-REI.D10 | Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). | | |
| | G-GPE.B.5 | Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point). | | |
| | S-ID.C.7 | Interpret the slope (rate of change) and the intercept (constant term) of a linear fit in the context of the data. | | |

Unit 5: Linear Inequalities (7 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|------------------|--|--|
| - Solve linear inequalities - Graph linear inequalities | A-CED.A.1 | Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions. | - Inequality - Less than - Less than or equal to - Greater than - Greater than or equal to - Half-plane |
| | A-CED.A.2 | Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. | |
| | A-CED.A.3 | Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods. | |
| | F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. | |
| | F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | |
| | F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. | |
| | A-REI.A1 | Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. | |
| | A-REI.B3 | Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. | |
| | A-REI.D12 | Graph the solutions to a linear inequality in two variables as a halfplane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. | |

QUARTER 3

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Unit 6: Systems of Linear Equations & Inequalities (11 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|------------------|---|--|
| <ul style="list-style-type: none"> - Solve systems of linear equations - Graphing - Substitution - Elimination - Solve systems of linear inequalities | F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. | <ul style="list-style-type: none"> - System of Equations - Substitution - Elimination - System of Inequalities |
| | F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | |
| | A-REI.C5 | Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. | |
| | A-REI.C6 | Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. | |
| | A-REI.D10 | Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). | |
| | A-REI.D11 | Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.* | |
| | A-REI.D12 | Graph the solutions to a linear inequality in two variables as a halfplane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. | |

Unit 7: Exponential (16 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|------------------|--|---|
| <ul style="list-style-type: none"> - Graph exponential functions - Solve problems involving exponential growth and decay - recognize and use geometric sequences | F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. | <ul style="list-style-type: none"> - Exponential growth - Exponential decay - Geometric Sequence - Exponent - Base |
| | F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | |
| | F-IF.C.7e | Graph exponential functions | |
| | F-IF.C.8b | Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in functions such as $y = (1.2)^t$, $y = (0.97)^t$, $y = (1.1)^{12t}$, $y = (1.2)^{t/10}$, and classify them as representing exponential growth or decay. | |
| | F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. | |
| | F-BF.B3 | Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. | |
| | F-LE.A1 | Distinguish between situations that can be modeled with linear functions and with exponential functions. | |
| | F-LE.A1.a | Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. | |

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|------------|--|--|--|
| F-LE.A1.c | Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. | | |
| F-LE.A2 | Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table). | | |
| F-LE.A3 | Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. | | |
| F-LE.B5 | Interpret the parameters in a linear or exponential function in terms of a context. | | |
| A-SSE.B.3 | Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. | | |
| A-SSE.B.3c | Use the properties of exponents to transform expressions for exponential functions. For example the expression $1.15t$ can be rewritten as $(1.151/12)^{12t} \approx 1.12^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%. | | |
| A-REI.A1 | Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. | | |
| N-RN.A1 | Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5(1/3)^3$ to hold, so $(5^{1/3})^3$ must equal 5 | | |
| N-RN.A2 | Rewrite expressions involving radicals and rational exponents using the properties of exponents. | | |

Unit 8: Polynomials (12 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|------------|--|--|
| - Find products and quotients of monomials - Find the degree of a polynomial - Add, subtract, multiply polynomials | A-APR.A1 | Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. | - Monomial - Binomial - Polynomial - Distributive Property - Factor - Difference of Squares |
| | A-APR.C5 | . (+) Know and apply the Binomial Theorem for the expansion of $(x + y)^n$ in powers of x and y for a positive integer n , where x and y are any numbers, with coefficients determined for example by Pascal's Triangle. ¹ | |
| | F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | |
| | F-IF.C.7c | Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. | |
| | A-SSE.A.1 | Interpret expressions that represent a quantity in terms of its context. | |
| | A-SSE.A.1a | Interpret parts of an expression, such as terms, factors, and coefficients. | |
| | A-SSE.A.1b | Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret $P(1+r)^n$ as the product of P and a factor not depending on P . | |
| | A-SSE.A.2 | Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$. | |
| | N-RN.A1 | Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5(1/3)^3$ to hold, so $(5^{1/3})^3$ must equal 5 | |
| | N-RN.A2 | Rewrite expressions involving radicals and rational exponents using the properties of exponents. | |

QUARTER 4

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Unit 9: Quadratics (19 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|---|---|--|
| - Graph quadratic equations - Solve quadratics using graphing, completing the square, factoring, and quadratic formula | A-APR.B3 | Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. | - Quadratic - Completing the square - Parabola - Roots - Factoring - Quadratic formula - Difference of squares |
| | F-IF.B.4 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. | |
| | F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. | |
| | F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | |
| | F-IF.C.7a | Graph linear and quadratic functions and show intercepts, maxima, and minima. | |
| | F-IF.C.8a | Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. | |
| | F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. | |
| | F-BF.B3 | Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. | |
| | A-SSE.A.2 | Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$. | |
| | A-SSE.B.3 | Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. | |
| | A-SSE.B.3a | Factor a quadratic expression to reveal the zeros of the function it defines. | |
| | A-SSE.B.3b | Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. | |
| | A-REI.A1 | Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. | |
| | A-REI.B4 | Solve quadratic equations in one variable. | |
| | A-REI.B4.A | Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form. | |
| A-REI.B4.B | Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b. | | |
| A-REI.C7 | Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$. | | |

Algebra 1 Curriculum Map 2021-22

Unit 10: Statistics (10 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|---|---|--|
| <ul style="list-style-type: none"> - Plot data in various forms - Analyze data sets - Find the line of best fit | S-ID.A.1 | Represent data with plots on the real number line (dot plots, histograms, and box plots). | <ul style="list-style-type: none"> - median - mean - interquartile range - standard deviation - outlier - correlation - causation - dot plot - histogram - box plot - two-way frequency table - scatter plot - line of best fit |
| | S-ID.A.2 | Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. | |
| | S-ID.A.3 | Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). | |
| | S-ID.B.5 | Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal and conditional relative frequencies). Recognize possible associations and trends in the data. | |
| | S-ID.B.6 | Represent data on two quantitative variables on a scatter plot and describe how the variables are related. | |
| | S-ID.B.6a | Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models. | |
| | S-ID.B.6b | Informally assess the fit of a model function by plotting and analyzing residuals. | |
| | S-ID.B.6c | Fit a linear function for scatter plots that suggest a linear association. | |
| | S-ID.C.7 | Interpret the slope (rate of change) and the intercept (constant term) of a linear fit in the context of the data. | |
| | S-ID.C.8 | Compute (using technology) and interpret the correlation coefficient of a linear fit. | |
| | S-ID.C.9 | Distinguish between correlation and causation. | |
| | Notes: | | |
| | * <i>Some items are crossed out in the HS math pacing guides. This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters</i> | | |
| | * <i>Red items indicate power standards</i> | | |

Geometry Curriculum Map 2021-22

QUARTER 1

Unit 1: Tools of Geometry & Constructions (16 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|-----------|---|--|
| | G-CO.A.1 | Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. | <ul style="list-style-type: none"> - Angle - Circle - Perpendicular line - Parallel line - Line segment - Construction - Bisect - Perpendicular bisector - Equilateral triangle - Square - Regular hexagon - Inscribed |
| | G-CO.C.10 | Prove theorems about triangles. Theorems include measures of interior angles of a triangle sum to 180° ; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point. | |
| | G-CO.D.12 | Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line. | |
| | G-CO.D.13 | Construct an equilateral triangle, a square and a regular hexagon inscribed in a circle. | |

Unit 2: Angles & Lines (13 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|-----------|--|---|
| | G-CO.C.9 | Prove theorems about lines and angles. Theorems include vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints, | <ul style="list-style-type: none"> - Vertical angles - Congruent - Transversal - Corresponding angles - Alternate interior angles - Same side interior angles - Alternate exterior angles - Same side exterior angles - Directed line segment - Partitions - Perimeter |
| | G-GPE.B.5 | Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point). | |
| | G-GPE.B.6 | Find the point on a directed line segment between two given points that partitions the segment in a given ratio. | |
| | G-GPE.B.7 | Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.★ | |

Unit 3: Transformations (13 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|-----------|--|-----------------|
| | G-CO.A.2 | Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). | |
| | G-CO.A.3 | Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself. | |
| | G-CO.A.4 | Develop definitions of rotations, reflections and translations in terms of angles, circles, perpendicular lines, parallel lines and line segments. | |
| | G-CO.A.5 | Given a geometric figure and a rotation, reflection or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another. | |
| | G-SRT.A.1 | Verify experimentally the properties of dilations given by a center and a scale factor: | |

Geometry Curriculum Map 2021-22

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| G-SRT.A.1a | A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged. |
| G-SRT.A.1b | The dilation of a line segment is longer or shorter in the ratio given by the scale factor |

QUARTER 2

Unit 4: Congruence (12 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|------------------|--|-----------------|
| | G-CO.B.6 | Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. | |
| | G-CO.B.7 | Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. | |
| | G-CO.B.8 | Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions. | |
| | G-CO.C.10 | Prove theorems about triangles. Theorems include measures of interior angles of a triangle sum to 180° ; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point. | |
| | G-SRT.B.5 | Use congruence and-similarity criteria for triangles to solve problems and to prove relationships in geometric figures. | |

Unit 5: Similarity (8 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|------------------|---|-----------------|
| | G-CO.C.10 | Prove theorems about triangles. Theorems include measures of interior angles of a triangle sum to 180° ; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point. | |
| | G-SRT.A.2 | Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides. | |
| | G-SRT.A.3 | Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar. | |
| | G-SRT.B.4 | Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity | |
| | G-SRT.B.5 | Use congruence and-similarity criteria for triangles to solve problems and to prove relationships in geometric figures. | |

Unit 6: Right Triangles (9 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|------------------|---|-----------------|
| | G-SRT.B.4 | Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity | |
| | G-SRT.C.6 | Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles. | |

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| G-SRT.C.7 | Explain and use the relationship between the sine and cosine of complementary angles. |
| G-SRT.C.8 | Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. ★ |

QUARTER 3

Unit 7: General Triangles (7 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|---|-----------|-----------------|
| | <p>G-CO.C.10 Prove theorems about triangles. Theorems include measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.</p> <p>G-GPE.B.7 Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.★</p> <p>G-SRT.D.9 (+) Derive the formula $A = \frac{1}{2} ab \sin(C)$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side .</p> <p>G-SRT.D.10 (+) Prove the Laws of Sines and Cosines and use them to solve problems.</p> <p>G.SRT.D.11 (+) Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces).</p> | | |

Unit 8: Parallelograms (10 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|---|-----------|-----------------|
| | <p>G-CO.C.11 Prove theorems about parallelograms. Theorems include opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</p> <p>G-GPE.B.4 Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$</p> | | |

Unit 9: Circles & Conic Sections (21 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|--|-----------|-----------------|
| | <p>G-C.A.1 Prove that all circles are similar.</p> <p>G-C.A.2 Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.</p> <p>G-C.A.3 Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.</p> <p>G-C.A.4 (+) Construct a tangent line from a point outside a given circle to the circle.</p> <p>G-C.B.5 Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.</p> <p>G-GMD.A.1 Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments.</p> <p>G-GPE.A.1 Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.</p> | | |

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| | G-GPE.A.2 | Derive the equation of a parabola given a focus and directrix. | | |
| | G-GPE.B.4 | Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$ | | |

QUARTER 4

Unit 10: 3D Shapes (10 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|-----------|---|-----------------|
| | G-GMD.A.1 | Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments. | |
| | G-GMD.A.2 | (+) Give an informal argument using Cavalieri's principle for the formulas for the volume of a sphere and other solid figures. | |
| | G-GMD.A.3 | Use volume formulas for cylinders, pyramids, cones and spheres to solve problems. | |
| | G-GMD.B.4 | Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects. | |

Unit 11: Geometric Modeling (10 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|-----------------|---|-----------------|
| | G-MG.A.1 | Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).★ | |
| | G-MG.A.2 | Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).★ | |
| | G-MG.A.3 | Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).★ | |

Unit 12: Probability (13 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|----------------|--|-----------------|
| | S.CP.A1 | Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not"). | |
| | S.CP.A2 | Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent. | |
| | S.CP.A3 | Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B. | |
| | S.CP.A4 | Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results. | |
| | S.CP.A5 | Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer. | |

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| S.CP.B6 | Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model. |
| S.CP.B7 | Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model. |
| S.CP.B8 | (+) Apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B) = P(A)P(B A) = P(B)P(A B)$, and interpret the answer in terms of the model. |
| S.CP.B9 | (+) Use permutations and combinations to compute probabilities of compound events and solve problems. |
| S.MD.B6 | (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). |
| S.MD.B7 | (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game). |

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QUARTER 1

Unit 1: Linear Equations (10 days)

Some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Description / Focus | Standards | Resources | Unit Vocabulary: | |
|---|--|---|--|--|
| <ul style="list-style-type: none"> - Graph linear equations - Solve linear equations - Interpret the slope and y-intercept of a linear equation derived from a context | A-CED.A.1 Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions. **** | | <ul style="list-style-type: none"> - Slope - Rate of Change - y-intercept - Slope-intercept form - Point-slope form - Solution | |
| | F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | | |
| | F-IF.C.7a | Graph linear and quadratic functions and show intercepts, maxima, and minima.**** | | |
| | F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. | | |
| | F-LE.B5 | Interpret the parameters in a linear or exponential function in terms of a context. | | |
| | A-REI.B3 | Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. | | |
| | A-REI.C5 | Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. | | |
| | A-REI.C6 | Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. | | |
| A-REI.D10 | Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). | | | |

Unit 2: Building Skills (Factoring, simplifying radicals, and complex numbers) (9 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Description / Focus | Standards | Resources | Unit Vocabulary: |
|--|------------|---|---|
| <ul style="list-style-type: none"> - Factor trinomials - Simplify radical expressions - Introduce complex numbers | F-IF.C.8a | Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. | <ul style="list-style-type: none"> - Trinomial - Factor - Radical - Complex numbers |
| | A-SSE.B.3a | Factor a quadratic expression to reveal the zeros of the function it defines.**** | |
| | N-CN.A1 | Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real. | |
| | N-CN.A2 | Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers | |
| | N-CN.C8 | (+) Extend polynomial identities to the complex numbers. For example, rewrite $x^2 + 4$ as $(x + 2i)(x - 2i)$. | |

Unit 3: Quadratic Equations (20 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Description / Focus | Standards | Resources | Unit Vocabulary: |
|---|--|-----------|--|
| <ul style="list-style-type: none"> - Factor quadratic trinomials - Solve quadratic equations (factoring, completing the square) | A-CED.A.1 Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions. **** | | <ul style="list-style-type: none"> - Parabola - Root - Quadratic - Trinomial - Factor |
| | A-CED.A.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. | | |

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completing the square, quadratic formula, and graphing)
- Graph parabolas

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| A-CED.A.3 | Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods. |
| F-IF.B.4 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. |
| F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. |
| F-IF.B.6 | Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. |
| F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. |
| F-IF.C.7a | Graph linear and quadratic functions and show intercepts, maxima, and minima.**** |
| F-IF.C.8 | Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. |
| F-IF.C.8a | Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. |
| F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. |
| F-BF.B.3 | Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. |
| A-SSE.A.2 | Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$.**** |
| A-SSE.B.3 | Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.**** |
| A-SSE.B.3a | Factor a quadratic expression to reveal the zeros of the function it defines.**** |
| A-SSE.B.3b | Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. |
| A-REI.B4 | Solve quadratic equations in one variable.**** |
| A-REI.B4.A | Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.**** |
| A-REI.B4.B | Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a ± bi$ for real numbers a and b . |
| A-REI.C7 | Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$.**** |
| A-REI.D10 | Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). |

- Factor
- Maximum
- Minimum
- Vertex
- Complete the square
- Quadratic Formula
- Difference of Squares
- Imaginary Number
- Complex Number
- Fundamental Theorem of Algebra
- Standard Form
- Vertex Form
- Intercept Form

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| A-REI.D11 | Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.★ | | |
| N-CN.A1 | Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real. | | |
| N-CN.A2 | Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers | | |
| N-CN.C7 | Solve quadratic equations with real coefficients that have complex solutions. | | |
| N-CN.C9 | (+) Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials. | | |

QUARTER 2

Unit 4: Polynomial Equations (15 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Description / Focus | Standards | Resources | Unit Vocabulary: |
|--|-----------|---|--|
| <ul style="list-style-type: none"> - Add, subtract, multiply, and divide polynomials - Factor polynomials - Solve polynomial equations using the zero product property - Graph polynomial functions - Transform graphs of polynomial functions - Determine key features of polynomial graphs | A-CED.A.2 | Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. | <ul style="list-style-type: none"> - Monomial - Binomial - Trinomial - Polynomial - End Behavior - Factor - Binomial Theorem - Expand - Pascal's Triangle - Zero Product Property - Term - Coefficient - Constant - Degree |
| | A-CED.A.3 | Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods. | |
| | F-IF.B.4 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. | |
| | F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. | |
| | F-IF.B.6 | Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. | |
| | F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | |
| | F-IF.C.7c | Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. | |
| | F-IF.C.8 | Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. | |
| | F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. | |
| | F-BF.B.3 | Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. | |

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| A-SSE.A.2 | Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$.**** |
| A-APR.1 | Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. |
| A-APR.B2 | Know and apply the Remainder Theorem: For a polynomial $p(x)$ and a number a , the remainder on division by $x - a$ is $p(a)$, so $p(a) = 0$ if and only if $(x - a)$ is a factor of $p(x)$. |
| A-APR.B3 | Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. |
| A-APR.C4 | Prove polynomial identities and use them to describe numerical relationships. For example, the polynomial identity $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ can be used to generate Pythagorean triples. |
| A-APR.C5 | . (+) Know and apply the Binomial Theorem for the expansion of $(x + y)^n$ in powers of x and y for a positive integer n , where x and y are any numbers, with coefficients determined for example by Pascal's Triangle.1 |
| A-APR.D6 | Rewrite simple rational expressions in different forms; write $a(x)/b(x)$ in the form $q(x) + r(x)/b(x)$, where $a(x)$, $b(x)$, $q(x)$, and $r(x)$ are polynomials with the degree of $r(x)$ less than the degree of $b(x)$, using inspection, long division, or, for the more complicated examples, a computer algebra system. |
| A-REI.D10 | Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). |
| A-REI.D11 | Explain why the x -coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.★ |
| N-CN.A1 | Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real. |
| N-CN.A2 | Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers |
| N-CN.C8 | (+) Extend polynomial identities to the complex numbers. For example, rewrite $x^2 + 4$ as $(x + 2i)(x - 2i)$. |
| N-CN.C9 | (+) Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials. |

Unit 5: Rational Functions (13 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Description / Focus | Standards | Resources | Unit Vocabulary: |
|--|-----------|---|---|
| - Inverse variation - Graph rational functions - Add, subtract, multiply and divide rational expressions - Divide complex numbers - Solve rational equations - Find inverse relations | A-CED.A.2 | Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. | - Inverse Variation - Rational Equation - Rational Expression - Asymptote - Point of Discontinuity - End Behavior - Inverse |
| | A-CED.A.3 | Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods. | |
| | F-IF.B.4 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. | |

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| F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. |
| F-IF.B.6 | Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. |
| F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. |
| F-IF.C.7d | Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior. |
| F-IF.C.8 | Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. |
| F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. |
| F-BF.B3 | Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. |
| F-BF.B4 | Find inverse functions. |
| F-BF.B4.a | Solve an equation of the form $f(x) = c$ for a simple function f that has an inverse and write an expression for the inverse. For example, $f(x) = 2x^3$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$. |
| A-APR.D7 | (+) Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions. |
| A-REI.A2 | Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.**** |
| A-REI.D10 | Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). |
| A-REI.D11 | Explain why the x -coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.★ |
| N-CN.A3 | (+) Find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers |

Unit 6: Series & Sequences (5 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Description / Focus | Standards | Resources | Unit Vocabulary: |
|---|-----------|--|---|
| - Mathematical patterns - Write formulas for sequences - Summation notation and evaluating sums | F-IF.A.3 | Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. For example, the Fibonacci sequence is defined recursively by $f(0) = f(1) = 1$, $f(n+1) = f(n) + f(n-1)$ for $n \geq 1$. | - Recursive - Explicit - Series - Sequences - Fibonacci Sequence - Finite Geometric Series |
| | A-SSE.B.4 | Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems. For example, calculate mortgage payments. | |

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QUARTER 3

Unit 7: Radical Functions (12 days)

Note: some items are crossed out in the HS math pacing guides.

This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Description / Focus | Standards | Resources | Unit Vocabulary: |
|--|---|---|--|
| <ul style="list-style-type: none"> - Simplify radical expressions - Multiply and divide rational expressions - Rewrite radical expressions with radical exponents - Solve radical equations - Graph radical functions - Find inverse functions | A-CED.A.2 | Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. | <ul style="list-style-type: none"> - Radical Equation - Radical Expression - Rational Exponents |
| | A-CED.A.3 | Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods. | |
| | A-CED.A.4 | Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law $V = IR$ to highlight resistance R . | |
| | F-IF.B.4 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. | |
| | F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. | |
| | F-IF.B.6 | Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. | |
| | F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | |
| | F-IF.C.7b | Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. | |
| | F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. | |
| | F-BF.B3 | Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. | |
| | F-BF.B4 | Find inverse functions. | |
| | F-BF.B4.a | Solve an equation of the form $f(x) = c$ for a simple function f that has an inverse and write an expression for the inverse. For example, $f(x) = 2x^3$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$. | |
| | A-REI.A2 | Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.**** | |
| A-REI.D10 | Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). | | |

Algebra 2 Curriculum Map 2021-22

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|--|------------------|---|--|--|
| | A-REI.D11 | Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.★ | | |
| | N-RN.1 | Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5(1/3)^3$ to hold, so $(5^{1/3})^3$ must equal 5 | | |
| | N-RN.2 | Rewrite expressions involving radicals and rational exponents using the properties of exponents. | | |
| | N-RN.3 | Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational. | | |

Unit 8: Exponential & Logarithmic Equations (16 days)
Note: some items are crossed out in the HS math pacing guides.
This is in part due to the fact that Alg I & II share the same standards and some parts of the standards only apply to particular courses or quarters

| Unit Description / Focus | Standards | Resources | Unit Vocabulary: |
|--|---|--|---|
| - Exponential growth & decay - Graph exponential functions - Use logarithms as the inverse of exponential functions - Solve exponential and logarithmic equations - Model with exponential and logarithmic functions | A-SSE.B.4 | Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems. For example, calculate mortgage payments. | - Geometric Sequence - Exponential Growth - Exponential Decay - Logarithm - Natural Logarithm |
| | A-CED.A.2 | Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. | |
| | F-IF.B.4 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. | |
| | F-IF.B.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. | |
| | F-IF.B.6 | Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. | |
| | F-IF.C.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. | |
| | F-IF.C.7e | Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. | |
| | F-IF.C.8 | Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. | |
| | F-IF.C.8b | Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in functions such as $y = (1.2)^t$, $y = (0.97)^t$, $y = (1.1)^{12t}$, $y = (1.2)^{t/10}$, and classify them as representing exponential growth or decay. | |
| | F-IF.C.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. | |
| F-BF.A1.b | Combine standard function types using arithmetic operations. For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model. | | |

Algebra 2 Curriculum Map 2021-22

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| | F-BF.B3 | Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. | | |
| | F-LE.A4 | For exponential models, express as a logarithm the solution to $abct = d$ where a , c , and d are numbers and the base b is 2, 10, or e ; evaluate the logarithm using technology. | | |
| | F-LE.B5 | Interpret the parameters in a linear or exponential function in terms of a context. | | |
| | A-SSE.B.3 | Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.**** | | |
| | A-REI.D10 | Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). | | |
| | A-REI.D11 | Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.★ | | |

QUARTER 4

Unit 9: Probability (19 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary: |
|--|-----------|--|---|
| <ul style="list-style-type: none"> - Permutations and combinations - Independent and dependent events - Conditional probability - Random variables & probability distributions - Expected value | S-CP.A.1 | Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not"). | <ul style="list-style-type: none"> - Probability - Sample Space - Outcomes - Union - Intersection - Complement - Independent Events - Conditional Probability - Two-way frequency table - Addition Rule - Multiplication Rule - Probability Distribution - Expected Value - Permutation - Combination - Random Variable - Fair Decision - Random Sample |
| | S-CP.A.2 | Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent. | |
| | S-CP.A.3 | Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A , and the conditional probability of B given A is the same as the probability of B . | |
| | S-CP.A.4 | Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results. | |
| | S-CP.A.5 | Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer. | |
| | S-CP.B.6 | Find the conditional probability of A given B as the fraction of B 's outcomes that also belong to A , and interpret the answer in terms of the model. | |
| | S-CP.B.7 | Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model. | |
| | S-CP.B.8 | (+) Apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B) = P(A)P(B A) = P(B)P(A B)$, and interpret the answer in terms of the model. | |
| | S-CP.B.9 | (+) Use permutations and combinations to compute probabilities of compound events and solve problems. | |

Algebra 2 Curriculum Map 2021-22

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| S-MD.A.1 | (+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions. |
| S-MD.A.2 | (+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution. |
| S-MD.A.3 | (+) Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. For example, find the theoretical probability distribution for the number of correct answers obtained by guessing on all five questions of a multiple-choice test where each question has four choices, and find the expected grade under various grading schemes. |
| S-MD.A.4 | (+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. For example, find a current data distribution on the number of TV sets per household in the United States, and calculate the expected number of sets per household. How many TV sets would you expect to find in 100 randomly selected households? |
| S-MD.B.5 | (+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values. |
| S-MD.B.5a | Find the expected payoff for a game of chance. For example, find the expected winnings from a state lottery ticket or a game at a fastfood restaurant. |
| S-MD.B.5b | Evaluate and compare strategies on the basis of expected values. For example, compare a high-deductible versus a low-deductible automobile insurance policy using various, but reasonable, chances of having a minor or a major accident. |
| S-MD.B.6 | (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). |
| S-MD.B.7 | (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game). |

Unit 10: Statistics (18 days)

| Unit Description / Focus | Standards | Resources | Unit Vocabulary: |
|---|-----------------|--|--|
| - Line of best fit - Normal distribution curve - Samples & biases - Making inferences with sample statistics | S-IC.A1 | Understand statistics as a process for making inferences about population parameters based on a random sample from that population. | - Survey - Experiment - Observational Study - Dot Plot - Histogram - Box Plots - Distribution - Scatter Plot - Correlation Coefficient - Correlation - Causation - Line of best fit - Function of best fit - Normalize - Sample - Random Sample - Bias |
| | S-IC.A2 | Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model? | |
| | S-IC.B3 | Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each. | |
| | S-IC.B4 | Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling. | |
| | S-IC.B5 | Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant. | |
| | S-IC.B6 | Evaluate reports based on data. | |
| | S-ID.A.1 | Represent data with plots on the real number line (dot plots, histograms, and box plots). | |
| | S-ID.A.2 | Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.**** | |
| | S-ID.A.3 | Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).**** | |
| | S-ID.A.4 | Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets and tables to estimate areas under the normal curve. | |

Algebra 2 Curriculum Map 2021-22

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| | S-ID.B.5 | Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal and conditional relative frequencies). Recognize possible associations and trends in the data. | | |
| | S-ID.B.6 | Represent data on two quantitative variables on a scatter plot and describe how the variables are related. | | |
| | S-ID.B.6a | Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models. **** | | |
| | S-ID.B.6b | Informally assess the fit of a model function by plotting and analyzing residuals. **** | | |
| | S-ID.B.6c | Fit a linear function for scatter plots that suggest a linear association. **** | | |
| | S-ID.C.7 | Interpret the slope (rate of change) and the intercept (constant term) of a linear fit in the context of the data. **** | | |
| | S-ID.C.8 | Compute (using technology) and interpret the correlation coefficient of a linear fit. **** | | |
| | S-ID.C.9 | Distinguish between correlation and causation. **** | | |
| Unit 11: Trigonometry (12 days) | | | | |
| Unit Description / Focus | Standards | | Resources | Unit Vocabulary: |
| <ul style="list-style-type: none"> - Unit Circle - Convert degrees into radians & vice versa - Sine, cosine & tangent on the Unit Circle - Graphs of sine, cosine, and tangent | F-TF.A1 | Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle. | | <ul style="list-style-type: none"> - Trigonometry - Sine - Cosine - Tangent - Radian - Unit Circle - Period - Frequency |
| | F-TF.A2 | Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle. | | |
| | F-TF.B5 | Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline. | | |
| | F-TF.C8 | Prove the Pythagorean identity $\sin^2(\theta) + \cos^2(\theta) = 1$ and use it to find $\sin(\theta)$, $\cos(\theta)$, or $\tan(\theta)$ given $\sin(\theta)$, $\cos(\theta)$, or $\tan(\theta)$ and the quadrant of the angle. | | |
| Unit 12: Matrices and Vectors (17 days) | | | | |
| Unit Description / Focus | Standards | | Resources | Unit Vocabulary: |
| <ul style="list-style-type: none"> - Matrix addition, subtraction, and multiplication - Inverse of a matrix - Determinant of a matrix - Transformations on the plane | A-REI.C8 | (+) Represent a system of linear equations as a single matrix equation in a vector variable. | | <ul style="list-style-type: none"> - Matrix - Vector - Inverse - Scalar |
| | A-REI.C9 | (+) Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension 3×3 or greater). | | |
| | N-VM.6 | (+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network. | | |
| | N-VM.7 | (+) Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled. | | |
| | N-VM.8 | (+) Add, subtract, and multiply matrices of appropriate dimensions | | |
| | N-VM.9 | (+) Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties. | | |
| | N-VM.10 | (+) Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse. | | |
| | N-VM.11 | (+) Multiply a vector (regarded as a matrix with one column) by a matrix of suitable dimensions to produce another vector. Work with matrices as transformations of vectors. | | |
| N-VM.12 | (+) Work with 2×2 matrices as transformations of the plane, and interpret the absolute value of the determinant in terms of area. | | | |

Schedule 7d: Curriculum

Science

- DPSA Introduction Science
- 9-12 Science Pacing Guides with Standard Descriptions
- 9-12 Science Curriculum Maps

Detroit Public Safety Academy



Science Best Practice Framework

Science Introduction

National and state standards in science not only encourage teachers to engage students with inquiry-based science, but to also emphasize the values, attributes and especially intellectual curiosity. In order for students to be able to build deep knowledge of science, they must do more than merely cover the subject matter; they must immerse themselves in doing science using systematic inquiry. (Zemelman, et al, 2005)

“Not all [students] will choose to become scientists but the science standards ask teachers to foster in all students the awareness of science as a dynamic creative interplay of questions and evidence, data and ideas, predictions and explanations” (Zemelman, et al, 2005)

“Science is an enterprise that can be harnessed to improve quality of life on a global scale. Science may provide a foundation for the development of language, logic and problem solving skills in the classroom. A democracy demands that its citizens make personal community based and national decisions that involve scientific information. For some students, science will become a lifelong vocation or avocation.” (Michaels, Shouse and Schweingruber, 2008).

In a best practice science classroom, students will have regular opportunities to:

- Engage in higher order thinking as part of a relevant and rigorous science curriculum
- Use evidence to support and communicate their understanding
- Become increasingly self-directed in their learning, leading to more student-led choices
- Build real-world connections using hands-on activities and apply that knowledge to new situations
- Encourage curiosity and questioning about the natural forces of the world to stimulate scientific inquiry in a variety of ways
- Create cooperative and collaborative communities
- Explore topics in depth, using research and deep study to internalize inquiry (Schmoker,2011)
- Engage in cross-curricular experiences
- Use scientific literacy to articulate and communicate scientific concepts (Marlene Their, 2002)
- Incorporate STEM (Science, Technology, Engineering and Math) into the science classroom (RESA,2011) and (NSTA, 2011)
- Students and teachers will use a variety of technology methods in order to enhance 21st Century Skills in Science
- Challenge misconceptions that students may have in order to correct and clarify scientific concepts (Learning Science and the Science of Learning, NSTA, Bybee, 2002)

PROTOCOLS OF BEST PRACTICES FOR SCIENCE

Science teachers need to differentiate teaching for all students on a daily basis. The following protocols have been identified to support Best Practice in science classrooms.

- Science teachers, with the assistance of support staff, should provide opportunities to have tests read to students with identified reading challenges. Teachers can use Audacity software to allow identified students to listen to tests
- Test taking procedures should be consistent throughout the district
- Pretests should be administered prior to the teaching of the unit
- As teachers are instructing and reviewing the unit, they should not use questions from common assessments verbatim
- Common assessments will be given by all teachers and will be used to track student progress and to drive instruction
- Science teachers will teach the Next Generation Science Standards using district adopted textbooks, kits and other materials as resources

- Pacing guides are to be followed as closely as possible to ensure understanding of the content expectations and increase student achievement from year to year.

STRATEGIES FOR INCORPORATING BEST PRACTICES IN SCIENCE

In order to promote inquiry science an identified approach needs to be established. The following strategies are student-specific interventions that are used by best practice science educators in classrooms.

Whole Group Instruction

Whole group instruction refers to the practice of teaching the same material simultaneously to an entire class. Whole class instruction generally implies that the same or similar assignments will be delivered to all students and an expectation exists that all students will be evaluated using the same assessment technique.

<http://www.danbury.k12.ct.us/currweb/glossary/xyz.html> p.1, 2005.

Teachers will generate interest and curiosity related to science concepts. They will clearly state objectives/content expectations. They will present and model essential questions and big ideas. They will clarify any misconceptions and build connections to real world situations and applications.

During whole group instruction, teachers will utilize multiple strategies including whole group discussions, science demonstrations, guided and dependent note taking and the use of interactive websites.

Examples of whole group strategies include:

- Teachers will include real life examples in the unit being studied such as current events from video streaming or weekly reader magazines like National Geographic, Time for Kids, Science World, Natural Inquirer, Mystery Science, Khan Academy and interactive websites (Phet <http://phet.colorado.edu/en/simulations/category/new>). This will enable students to make connections to what is being studied by using interactive models
- Teachers will state and post learning objectives in the classroom so students can connect previous and future learning
- Units will begin with whole group discussions where essential questions will be asked and generated. The students will begin to build a curiosity for the unit and come up with ideas and predictions in relation to what is being studied.
- Guided note taking is expected as students will be keeping science journals to write their thoughts, predictions and explanations of their findings.
- Thinking maps will access prior knowledge, organize new information and demonstrate understanding.

- Video conferencing will be utilized when appropriate to create discussions and participate in hands-on activities with other classrooms within or outside of the district. This may also be used to communicate with different scientists to answer essential questions.

Small Group Instruction

Small group instruction refers to the practice of teaching to small groups of students by the teacher or peers. It will allow students to be actively involved in a variety of learning opportunities matched to their personal strengths.

Small group instruction will be used to help meet the needs of all students through differentiation. Students will be grouped according to their learning needs. Student grouping should be based upon their instructional level and regrouped based upon observation and assessment, accuracy and comprehension. The teacher will support students by monitoring comprehension, constructing meaning and accelerating learning.

Some samples of small group instruction activities include:

- Students will work in small groups with hands-on activities
- Selected activities will give the students opportunities to rest, explore and investigate the learning objectives
- Discussion within the small groups will promote thinking and problem solving by leading students to compare alternative ideas and solutions (Daniels, 2005)
- Students should be challenged to support their arguments and motivated to seek answers via text, research, etc.
- Labs should be formatted as small group, student-designed inquiry
- *Think pair share* and cooperative learning groups will be used in the classroom
- *Small group presentations* and debates will be facilitated

Checking for Understanding

Checking for understanding is “an important step in the teaching and learning process. Research suggests that an important part of the learning process in all content areas is identifying and confronting misconceptions that can interfere with learning.”(Fisher and Frey, 2007)

During independent learning, the teacher will assess, decide and teach/demonstrate one concept that a student can apply to their knowledge base. During this time teachers can employ the methods of reinforcing, re-teaching or rephrasing to meet the unique needs of each student.

Some examples of methods that teachers may use to check for understanding include:

- Teachers will keep checklists to guide observations
- Teachers can use student self-evaluation forms, portfolios and journals to check for understanding.

- Teachers will use performance-based assessments such as extracting DNA from a strawberry, diagramming cell organelles, and labeling parts and functions of living and non-living things to deepen understanding.
- Teachers must address students' existing beliefs and knowledge and directly confront misconceptions and naïve theories (Zemelman et.al. p.152)
- Teachers will use formative assessments and exit tickets along with summative assessments such as formal tests, quizzes and practical examinations.

Informational Science Reading

Informational text will be used to help expose students to a wide range of scientific literature, information and data. This will encourage students to build scientific vocabulary and construct meaning of scientific concepts.

Some examples of informational science reading include:

- Text features will be discussed and explained so students will be able to find and interpret information
- Non-fiction leveled reading science text will be used in small guided reading groups to help promote and incorporate science into different content areas
- Reading non-fiction texts will serve to prepare the students to read scientific articles.
- Teachers will model how to read science text by showing students how to annotate, reread and refer to graphics. This will encourage student understanding, assist students in forming arguments and help them to make connections. (Shanahan and Shanahan p.53, 2008)
- Reading non-fiction books will develop vocabulary among all students
- Students will be encouraged to read about current events in science

Student Vocabulary

According to Pikulski and Templeton (2004), "Perhaps the greatest tools we can give students for succeeding, not only in their education but more generally in life, is a large, rich vocabulary and the skills for using those words."

Teachers shall introduce scientific vocabulary relating to real world situations. This will encourage students to define science concepts in their own words to help make the terms more meaningful.

Some examples of vocabulary activities for grades 9th through 12th grade include:

- Flashcards
- Games (i.e., Bingo)
- Writing Vocabulary
- Word Walls
- Journaling using Vocabulary Words

- Define & Sketch Assignments
- Use of “instructional” read-aloud events
- Providing direct instruction in the meanings of clusters of words and individual words
- Systematically teaching students the meaning of prefixes, suffixes and root words
- Linking spelling instruction to reading and vocabulary instruction
- Teaching the effective, efficient, realistic use of dictionaries, thesauri and other reference works
- Provide illustrations that explain meaning for scientific terms and concepts
- Teaching, modeling and encouraging the application of a word-learning strategy
- Encouraging wide reading experiences to include science topics

Speaking and Listening

“Learners communicate and justify their proposed explanations to classmates and teachers by presenting their reasoning and evidence through oral and written expression” (Zemelman et.al. 2005). One goal for science instruction is for students to generate their own questions and lead discussions with their peers. “Discussion promotes thinking and problem solving, by leading students to compare alternative ideas and solutions” (p. 153). For this to happen, students must be guided to the aspects of peer-to-peer discussion such as respecting differing opinions and being open to new ideas. During these discussions, the students will include scientific theories and factual information. Students should be able to logically present evidence to support their findings.

Ways to encourage and incorporate speaking and listening in the classroom are:

- Students will write reports or essays based on their finding to explain and support their understanding and present it to the class
- Students will share their findings in both small group and whole group settings.
- Students will follow classroom expectations and practice their active listening skills when classmates are presenting.
- Students will use videoconferencing to speak to and listen to science professionals.
- Students will participate in debates and presentations.
- Examples of presentation media available to students include:
 - Podcasts
 - Screencasting
 - Cameras, Smart Board, presentation software, and iPads to create presentations

Scientific Inquiry

Members of the Biological Science curriculum Study (BSCS) discuss the five essential features of inquiry: engaging the learner, teaching the learner to use evidence to respond to scientific

questions, teaching the learner to formulate explanations from evidence, connecting explanation to scientific knowledge and communicating and justifying explanations (Bybee, 2006).

In order to promote inquiry science:

Teachers [will] require student led investigations and activities to promote higher-level thinking and cooperative learning. Learners [will] attempt to answer these questions through many types of hands-on investigations. Students [will] analyze and interpret data, synthesize their ideas, make inferences and predictions, build models and actively create, modify and discard some explanations or answers. (Zemelman, et. Al., 2005)

Students need to support scientific conclusions with data collected in inquiry science. Teachers [will] help students learn how to ask and answer scientifically oriented questions. Learners [will] attempt to answer these questions through many types of hands-on investigations. Students [will] analyze and interpret data, synthesize their ideas, make inferences and predictions, build models and actively create, modify and discard some explanations or answers. (Zemelman, et.al. 2005)

Examples of methods to implement scientific inquiry in the classroom include:

- Students should work together by asking questions, investigating natural phenomena, solving problems and making sense of data by formulating conclusions (Hammerman, 2006)
- The Five Essentials: Engage the learner, teach the learner, use evidence to respond to questions, formulate explanation from evidence, connect an explanation with scientific knowledge and justify explanations (Bybee, 2006)
- Students will begin each year by reviewing science process skills such as observation, classification, making inferences, prediction, measurement, using numbers, creating models, defining operationally, identifying variables, formulating hypotheses, recording and interpreting data and drawing conclusions
- By communicating results of their investigations, students [can] take pride in their accomplishments, link science to other subjects, discuss implications, develop confidence in their learning and ask new questions (Hammerman, 2006)

Examples of Inquiry Investigations

Open-ended labs, student led investigations, data analysis, model building and hands on investigations will focus on scientific concepts such as:

- Power
- Natural selection
- Mendelian Genetics
- Acids/Bases
- Decomposition/Synthesis
- Oxidation/Reduction

- Endothermic/Exothermic
- Stoichiometry
- Chemical Equations
- Chemical Formulas
- Gas laws
- Valence electrons
- Bonding

Scientific Response

According to Zemelman and Hyde (Zemelman, et.al. 2005) “the craft of writing is most effectively taught through a brief mini lesson, focused on skills appropriate to particular writing tasks.” Timely practice of skills will be encouraged through the immediate use of knowledge in the science classroom.

“Learners will extend their new understanding and ability and then apply what they have learned to new situations” (Zemelman, et.al. 2005). Students will have opportunities to respond before, during and after each lesson. Teachers will encourage verbal, written and illustrated representations of their understanding of the scientific concepts. Response will be encouraged during whole group, small group and individualized instruction. “Learners communicate and justify their proposed explanations to classmates and teachers by presenting their reasoning and evidence” (Zemelman, et.al. 2005).

Examples of student scientific responses in the classroom are:

- At the beginning of each unit teachers will lead a classroom discussion to access prior knowledge and generate questions which students want answered. During this time, predictions about the outcomes of the unit may be made
- Hands-on activities will be directed in small groups where students will work together to formulate a conclusion
- Students will show their understanding of the topic through verbal, written or illustrative representations
- Students will be encouraged to report findings in many different ways utilizing technology such as Smart Boards, iPads, Presentations and video clips from sources such as YouTube
- Utilize text response by implementing technology in the classroom such as iPads, Chromebooks, and a variety of presentation software.

Scientific Literacy

“Literacy is the spine that holds everything together in all subject areas” (Phillip and Wong, 2010). It is the key to learning all content areas.

“Students will be exposed to purposeful scientific reading and writing” (Schmoker, 2011). Teachers should provide a variety of literature containing specific scientific content for students.

This will teach them to form valid conclusions and participate in meaningful conversations (Zmach, 2006).

Teachers will introduce real life examples into the unit being studied using materials such as current event lessons from video streaming or science magazines.

Examples of scientific literacy in the classroom include:

- Teachers will model for students the process of keeping a scientific journal. These journals may be used to collect data on many different investigations such as the weather, the growth of a plant, the results of an experiment and conclusions based on observations throughout each unit.
- Writing activities such as science poems, non-fiction book reports, role-playing and lab analysis will be utilized in other content areas.
- Reading non-fiction science books, magazines and journals will help promote understanding of vocabulary and concepts taught.

Assessment

Assessments need to reach higher levels of Bloom's Taxonomy, evaluating students' ability to apply reasoning skills and make connections within the knowledge base. In order for growth and understanding of the subject matter to occur the expectations for science learning must be customized to measure student skills and mastery of core content, rather than on memorization of facts. This notion is echoed by the NSTA, stating "All assessments are aligned with 21st century curriculum and instruction and appropriately measure students' progress towards skills acquisition in addition to mastery to core content" (NSTA p.2, 2010)

Assessment will start with students learning and understanding scientific vocabulary. They will then be expected to develop questions and make connections to the current subject matter. The assessment will conclude with students being able to infer, analyze and synthesize information. The students will be provided with information and opportunities to practice each skill level to increase proficiency.

Examples of assessments used in the 9th-12th grade classroom include:

Summative Assessments

- State and Standardized Assessments
- District Common Assessments
- Classroom Assessments
- Projects
- Presentations
- Unit Tests

Formative Assessments

- Quizzes
- Homework/Daily Work
- Daily Science Bell Work
- Ticket out the Door, Exit Slips
- Students Self-Assessment Forms
- Student and Teacher Surveys
- Teacher observation/checklists
- Teacher questioning and student response
- Student feedback such as thumbs up/down, participation
- Writing prompts
- Technology
- Practice Tests
- Projects
- Presentations

Technology

“The use of technology will allow more students to be actively thinking about information, making choices and executing skills. “Technology provides the tools for investigative inquiry and analysis in the classroom. The products of technology enable students to extend powers of observation and to engage in scientific investigation much like the scientist does “(Hammerman, 2006).

“Technology should be used as a tool to support student performance in authentic tasks, students are in the position of defining their goals, making design decisions and evaluating their progress. The learning environment will be positively affected by the use of technology-based instructional strategies” (Hammerman, 2006)

2021-22 Quarterly Pacing Guide

| HS | Physical Science | Q1 | Q2 | Q3 | Q4 |
|--------------|---|----|----|----|----|
| SCI.HS | Science | | | | |
| SCI.HS.SPM | Structure and Properties of Matter | | | | |
| SCI.HS.PS1.1 | Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms | | | P | |
| SCI.HS.PS1.3 | Plan and conduct an investigation to gather evidence to compare the structure of substances at the bulk scale to infer the strength of electrical forces between particles | | | P | |
| SCI.HS.PS1.8 | Develop models to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay | | | P | |
| SCI.HS.PS2.6 | Communicate scientific and technical information about why the molecular-level structure is important in the functioning of designed materials | | | P | |
| SCI.HS.CR | Chemical Reactions | | | | |
| SCI.HS.PS1.2 | Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties | | | | P |
| SCI.HS.PS1.4 | Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy | | | | P |
| SCI.HS.PS1.5 | Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs | | | | P |
| SCI.HS.PS1.6 | Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium | | | | P |
| SCI.HS.PS1.7 | Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction | | | | P |
| SCI.HS.FI | Forces and Interactions | | | | |
| SCI.HS.PS2.1 | Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration | P | | | |
| SCI.HS.PS2.2 | Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system | P | | | |
| SCI.HS.PS2.3 | Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision | P | | | |
| SCI.HS.PS2.4 | Use mathematical representations of Newton's Law of Gravitation and Coulomb's Law to describe and predict the gravitational and electrostatic forces between objects | I | P | | |
| SCI.HS.PS2.5 | Plan and conduct an investigation to provide evidence that an electric current can produce a magnetic field and that a changing magnetic field can produce an electric current | | P | | |
| SCI.HS.ERGY | Energy | | | | |

| | | | | | | |
|---------------|--|--------------------------|----------|----------|----------|----------|
| SCI.HS.PS3.1 | Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known | P | | | | |
| SCI.HS.PS3.2 | Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motions of particles (objects) and energy associated with the relative position of particles (objects) | | I | P | | |
| SCI.HS.PS3.3 | Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy | | I | P | | |
| SCI.HS.PS3.4 | Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics) | | I | P | | |
| SCI.HS.PS3.5 | Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction | | P | | | |
| SCI.HS.WER | Waves and Electromagnetic Radiation | | | | | |
| SCI.HS.PS4.1 | Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media | | P | | | |
| SCI.HS.PS4.2 | Evaluate questions about the advantages of using a digital transmission and storage of information | | P | | | |
| SCI.HS.PS4.3 | Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other | | P | | | |
| SCI.HS.PS4.4 | Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter | | P | | | |
| SCI.HS.PS4.5 | Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy | | P | | | |
| SCI.HS.ED | Engineering Design | | | | | |
| SCI.HS.ETS1.1 | Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants | | | | P | |
| SCI.HS.ETS1.2 | Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering | | | | | |
| SCI.HS.ETS1.3 | Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts | | | | | |
| SCI.HS.ETS1.4 | Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem | | | | | |
| | | New Standards: | 4 | 8 | 7 | 5 |
| | | Review Standards: | 0 | 0 | 0 | 0 |



2021-22 Quarterly Pacing Guide

| HS | Earth & Space | Q1 | Q2 | Q3 | Q4 |
|---------------|---|----|----|----|----|
| SCI.HS | Science | | | | |
| SCI.HS.FI | Forces and Interactions | | | | |
| SCI.HS.PS2.1 | Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration | | | | |
| SCI.HS.PS2.2 | Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system | | | | |
| SCI.HS.PS2.3 | Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision | | | | |
| SCI.HS.PS2.4 | Use mathematical representations of Newton's Law of Gravitation and Coulomb's Law to describe and predict the gravitational and electrostatic forces between objects | | | | |
| SCI.HS.PS2.5 | Plan and conduct an investigation to provide evidence that an electric current can produce a magnetic field and that a changing magnetic field can produce an electric current | | | | |
| SCI.HS.WER | Waves and Electromagnetic Radiation | | | | |
| SCI.HS.PS4.1 | Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media | | | | |
| SCI.HS.PS4.2 | Evaluate questions about the advantages of using a digital transmission and storage of information | | | | |
| SCI.HS.PS4.3 | Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other | | | | |
| SCI.HS.PS4.4 | Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter | | | | |
| SCI.HS.PS4.5 | Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy | | | | |
| SCI.HS.SS | Space Systems | | | | |
| SCI.HS.ESS1.1 | Develop a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy that eventually reaches Earth in the form of radiation | P | | | |
| SCI.HS.ESS1.2 | Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe | P | | | |
| SCI.HS.ESS1.3 | Communicate scientific ideas about the way stars, over their life cycle, produce elements | P | | | |
| SCI.HS.ESS1.4 | Use mathematical or computational representations to predict the motion of orbiting objects in the solar system | P | | | |
| SCI.HS.HE | History of Earth | | | | |

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|---------------|---|--|---|---|---|
| SCI.HS.ESS1.5 | Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks | | P | | |
| SCI.HS.ESS1.6 | Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history | | P | | |
| SCI.HS.ESS2.1 | Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features | | P | | |
| SCI.HS.ES | Earth's Systems | | | | |
| SCI.HS.ESS2.2 | Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems | | P | | |
| SCI.HS.ESS2.3 | Develop a model based on evidence of Earth's interior to describe the cycling of matter by thermal convection | | P | | |
| SCI.HS.ESS2.5 | Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes | | | P | |
| SCI.HS.ESS2.6 | Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere | | | P | |
| SCI.HS.ESS2.7 | Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth | | | P | |
| SCI.HS.WC | Weather and Climate | | | | |
| SCI.HS.ESS2.4 | Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate | | | P | |
| SCI.HS.ESS3.5 | Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems | | | | P |
| SCI.HS.HSA | Human Sustainability | | | | |
| SCI.HS.ESS3.1 | Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity | | | P | |
| SCI.HS.ESS3.2 | Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios | | | | P |
| SCI.HS.ESS3.3 | Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity | | | | P |
| SCI.HS.ESS3.4 | Evaluate or refine a technological solution that reduces impacts of human activities on natural systems | | | | P |
| SCI.HS.ESS3.6 | Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity | | | | P |
| SCI.HS.ED | Engineering Design | | | | |
| SCI.HS.ETS1.1 | Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants | | | | |
| SCI.HS.ETS1.2 | Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering | | | | P |

| | | | | | | |
|---------------|--|--------------------------|----------|----------|----------|----------|
| SCI.HS.ETS1.3 | Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts | | | | | |
| SCI.HS.ETS1.4 | Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem | | | | | |
| | | New Standards: | 4 | 5 | 5 | 6 |
| | | Review Standards: | 0 | 0 | 0 | 0 |

2021-22 Quarterly Pacing Guide

| HS | Biology/Life Science | Q1 | Q2 | Q3 | Q4 |
|---------------------|---|----|----|----|----|
| SCI.HS | Science | | | | |
| SCI.HS.FI | Forces and Interactions | | | | |
| SCI.HS.PS2.1 | Analyze data to support the claim that Newton’s second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration | | | | |
| SCI.HS.PS2.2 | Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system | | | | |
| SCI.HS.PS2.3 | Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision | | | | |
| SCI.HS.PS2.4 | Use mathematical representations of Newton’s Law of Gravitation and Coulomb’s Law to describe and predict the gravitational and electrostatic forces between objects | | | | |
| SCI.HS.PS2.5 | Plan and conduct an investigation to provide evidence that an electric current can produce a magnetic field and that a changing magnetic field can produce an electric current | | | | |
| SCI.HS.WER | Waves and Electromagnetic Radiation | | | | |
| SCI.HS.PS4.1 | Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media | | | | |
| SCI.HS.PS4.2 | Evaluate questions about the advantages of using a digital transmission and storage of information | | | | |
| SCI.HS.PS4.3 | Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other | | | | |
| SCI.HS.PS4.4 | Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter | | | | |
| SCI.HS.PS4.5 | Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy | | | | |
| SCI.HS.SF | Structure and Function | | | | |
| SCI.HS.LS1.1 | Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells | P | | | |
| SCI.HS.LS1.2 | Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms | P | | | |
| SCI.HS.LS1.3 | Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis | P | | | |
| SCI.HS.MEOE | Matter and Energy in Organisms and Ecosystems | | | | |
| SCI.HS.LS1.5 | Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy | | P | | |

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|--------------|---|---|---|---|---|
| SCI.HS.LS1.6 | Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules | | P | | |
| SCI.HS.LS1.7 | Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy | | P | | |
| SCI.HS.LS2.3 | Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions | | P | | |
| SCI.HS.LS2.4 | Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem | | P | | |
| SCI.HS.LS2.5 | Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere | | P | | |
| SCI.HS.IRE | Interdependent Relationships in Ecosystems | | | | |
| SCI.HS.LS2.1 | Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales | | | | P |
| SCI.HS.LS2.2 | Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales | | | | P |
| SCI.HS.LS2.6 | Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem | | | | P |
| SCI.HS.LS2.7 | Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity | | | | P |
| SCI.HS.LS2.8 | Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce | | | | P |
| SCI.HS.LS4.6 | Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity | | | | P |
| SCI.HS.IVT | Inheritance and Variation of Traits | | | | |
| SCI.HS.LS1.4 | Use a model to illustrate the role of cellular division (mitosis) and differentiation in producing and maintaining complex organisms | P | | | |
| SCI.HS.LS3.1 | Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring | | P | | |
| SCI.HS.LS3.2 | Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors | | P | | |
| SCI.HS.LS3.3 | Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population | | | P | |
| SCI.HS.NSE | Natural Selection and Evolution | | | | |

| | | | | | | |
|---------------|--|--------------------------|----------|----------|----------|----------|
| SCI.HS.LS4.1 | Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence | | | P | | |
| SCI.HS.LS4.2 | Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment | | | P | | |
| SCI.HS.LS4.3 | Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait | | | P | | |
| SCI.HS.LS4.4 | Construct an explanation based on evidence for how natural selection leads to adaptation of populations | | | P | | |
| SCI.HS.LS4.5 | Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species | | | P | | |
| SCI.HS.ED | Engineering Design | | | | | |
| SCI.HS.ETS1.1 | Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants | | | | | |
| SCI.HS.ETS1.2 | Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering | | | | | |
| SCI.HS.ETS1.3 | Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts | | | | | |
| SCI.HS.ETS1.4 | Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem | | | | P | |
| | | New Standards: | 4 | 8 | 6 | 7 |
| | | Review Standards: | 0 | 0 | 0 | 0 |

Curriculum Map 2021-2022



QUARTER 1

Unit 1: Forces and Motion (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|---|---|---|
| -understand Newton's second law of motion -use mathematical representations to illustrate Newton's second law | SCI.HS.PS2.1 Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration | pHet, ReadWorks.org, Odysseyware, <i>Physical Science</i> (Glencoe), <i>Chemistry</i> (Prentice Hall) | acceleration, mass, collision, net force, energy, change, Newton's second law of motion |
| | SCI.HS.PS2.2 Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system | | |
| | SCI.HS.PS2.3 Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision | | |
| | SCI.HS.PS3.1 Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known | | |

QUARTER 2

Unit 2: Electricity and Magnetism (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|---|---|---|
| -understand the effect of forces on objects - understanding of electric and magnetic fields | SCI.HS.PS2.4 Use mathematical representations of Newton's Law of Gravitation and Coulomb's Law to describe and predict the gravitational and electrostatic forces between objects | pHet, ReadWorks.org, Odysseyware, <i>Physical Science</i> (Glencoe), <i>Chemistry</i> (Prentice Hall) | gravity, magnetic field, electricity, electromagnetic, current, Coulomb's Law, Law of Gravitation |
| | SCI.HS.PS2.5 Plan and conduct an investigation to provide evidence that an electric current can produce a magnetic field and that a changing magnetic field can produce an electric current | | |
| | SCI.HS.PS3.5 Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction | | |

Unit 3: Waves and Electromagnetic Radiation(days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|---|---|---|
| -understand the behavior of waves -explore different types of waves | SCI.HS.PS4.1 Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media | pHet, ReadWorks.org, Odysseyware, <i>Physical Science</i> (Glencoe), <i>Chemistry</i> (Prentice Hall) | electromagnetic radiation, wavelength, frequency, |
| | SCI.HS.PS4.2 Evaluate questions about the advantages of using a digital transmission and storage of information | | |
| | SCI.HS.PS4.3 Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other | | |

Curriculum Map 2021-2022



| | | | | |
|--|--------------|---|--|--|
| | SCI.HS.PS4.4 | Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter | | |
| | SCI.HS.PS4.5 | Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy | | |

QUARTER 3

Unit 4: Energy (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|--------------|---|---|
| -transfer of energy -different forms of energy | SCI.HS.PS3.2 | pHet, ReadWorks.org, Odysseyware, Physical Science (Glencoe), Chemistry (Prentice Hall) | energy, thermodynamics, particle, relative, closed system |
| | SCI.HS.PS3.3 | | |
| | SCI.HS.PS3.4 | | |

Unit 5: Structure and Properties of Matter (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|--------------|---|---|
| -understand the function and organization of the periodic table | SCI.HS.PS1.1 | pHet, ReadWorks.org, Odysseyware, Physical Science (Glencoe), Chemistry (Prentice Hall) | periodic table, element, atomic structure, fission, fusion, radioactive decay, proton, neutron, electron, valence |
| | SCI.HS.PS1.3 | | |
| | SCI.HS.PS1.8 | | |
| | SCI.HS.PS2.6 | | |

QUARTER 4

Unit 6: Chemical Reactions (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------|-----------|-----------|-----------------|
|------------|-----------|-----------|-----------------|

Curriculum Map 2021-2022

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|---|------------------|---|---|--|
| -understand why chemical reactions occur -explain how changes in conditions (i.e. temperature, pressure) impact chemical reactions | SCI.HS.PS1.2 | Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties | pHet, ReadWorks.org, Odysseyware, Physical Science (Glencoe), Chemistry (Prentice Hall) | chemical reaction, conservation of mass, equilibrium |
| | SCI.HS.PS1.4 | Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy | | |
| | SCI.HS.PS1.5 | Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs | | |
| | SCI.HS.PS1.6 | Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium | | |
| | SCI.HS.PS1.7 | Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction | | |
| Unit 7: Research Project (days) | | | | |
| Unit Focus | Standards | | Resources | Unit Vocabulary |
| -use knowledge of physical science to solve a global problem | SCI.HS.ETS1. | Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants | pHet, ReadWorks.org, Odysseyware, Physical Science (Glencoe), Chemistry (Prentice Hall) | dependent upon the topic being researched |

Curriculum Map 2021-2022

QUARTER 1

Unit 1: Big Bang (days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|---|---------------|--|---|--|
| -formation of the universe and evidence for the Big Bang Theory - star lifespans and element formation | SCI.HS.ESS1.1 | Develop a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy that eventually reaches Earth in the form of radiation | Earth Science (Glencoe), Odysseyware, pHet, ReadWorks.org | nuclear fusion, radiation, H-R diagram, cosmic background radiation, red shift, spectra, elements, atomic mass |
| | SCI.HS.ESS1.2 | Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe | | |
| | SCI.HS.ESS1.3 | Communicate scientific ideas about the way stars, over their life cycle, produce elements | | |

Unit 2: Orbital Motion (days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|--|---------------|---|---|---------------------------|
| -predict the orbital motion of a satellite | SCI.HS.ESS1.4 | Use mathematical or computational representations to predict the motion of orbiting objects in the solar system | Earth Science (Glencoe), Odysseyware, pHet, ReadWorks.org | orbital motion, satellite |

QUARTER 2

Unit 3: Early Earth (days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|--|---------------|---|---|--------------------------------------|
| -formation of the Earth and the solar system | SCI.HS.ESS1.6 | Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history | Earth Science (Glencoe), Odysseyware, pHet, ReadWorks.org | meteorite, rocky planets, gas giants |

Unit 4: Earth's Internal and Surface Processes(days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|--|---------------|--|---|---|
| - convection within the Earth - erosion/subduction of the Earth's crust | SCI.HS.ESS1.5 | Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks | Earth Science (Glencoe), Odysseyware, pHet, ReadWorks.org | oceanic crust, continental crust, subduction, plate tectonics, core, mantle divergent, transform, convergent, erosion |
| | SCI.HS.ESS2.1 | Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features | | |
| | SCI.HS.ESS2.3 | Develop a model based on evidence of Earth's interior to describe the cycling of matter by thermal convection | | |

Unit 5: Earth's Feedback Loops (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------|-----------|-----------|-----------------|
|------------|-----------|-----------|-----------------|

Curriculum Map 2021-2022



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|---|---------------|---|---|---------------------------|
| investigation of the many feedback loops present on Earth | SCI.HS.ESS2.2 | Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems | Earth Science (Glencoe), Odysseyware, pHet, ReadWorks.org | feedback loop, geoscience |
|---|---------------|---|---|---------------------------|

QUARTER 3

Unit 6: Cycling and the Environment (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|---------------|--|---|
| -water cycle -carbon cycle - climate change | SCI.HS.ESS2.5 | Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes | Earth Science (Glencoe), Odysseyware, pHet, ReadWorks.org |
| | SCI.HS.ESS2.6 | Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere | |
| | SCI.HS.ESS2.4 | Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate | |

Unit 7: The Environment and Life (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|---------------|--|---|
| -early Earth and early life - evolution of life on Earth climate changes and human activities | SCI.HS.ESS2.7 | Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth | Earth Science (Glencoe), Odysseyware, pHet, ReadWorks.org |
| | SCI.HS.ESS3.1 | Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity | |

QUARTER 4

Unit 8: Research Paper (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|---------------|--|---|
| -students will choose topics regarding human-caused environmental problems and evaluate potential solutions. | SCI.HS.ESS3.2 | Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios | Earth Science (Glencoe), Odysseyware, pHet, ReadWorks.org |
| | SCI.HS.ESS3.3 | Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity | |
| | SCI.HS.ESS3.4 | Evaluate or refine a technological solution that reduces impacts of human activities on natural systems | |
| | SCI.HS.ESS3.6 | Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity | |

Curriculum Map 2021-2022



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Biology Curriculum Map 2021-2022



QUARTER 1

Unit 1 Focus: DNA, RNA, and Protein (3 weeks)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|---|--|---|
| DNA is the genetic material that contains a code for proteins. DNA replicates by making a strand that is complementary to its original strand. DNA codes for RNA, which guides protein synthesis. Gene expression is regulated by the cell. | SCI.HS.LS1.1 Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells | <i>Biology</i> (McGraw Hill) textbook, notes, notebook, labs | Double helix, nucleosome, DNA replication, DNA polymerase, okazaki fragment, RNA, messenger RNA, ribosomal RNA, transfer RNA, transcription, RNA polymerase, intron, exon, codon, translation |
| | | | |
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Unit 2 Focus: Cellular Structure and Function (2 weeks)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|---|-------------------------------|---|
| Cells are the structural and functional units of all living things. The plasma membrane helps to maintain a cell's homeostasis. Eukaryotic cells contain organelles that allow the specialization and the separation of functions within the cell. Cellular transport moves | SCI.HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms | Biology TB, notes, slideshows | Cell, plasma membrane, organelle, eukaryotic cell, nucleus, prokaryotic cell, cytoplasm, cytoskeleton, ribosome, nucleolus, endoplasmic reticulum, golgi apparatus, vacuole, lysosome, centriole, mitochondrion, chloroplast, cell wall, cilium, flagellum, |
| | SCI.HS.LS1.3 Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis | | |
| | | | |
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| | | | |

Unit 3 Focus: Cellular Reproduction (3 weeks)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|--|-------------------------------|---|
| Cells grow until they reach their size limit, then they either stop growing or divide. Eukaryotic cells reproduce by mitosis, the process of nuclear division, and cytokinesis, | SCI.HS.LS1.4 Use a model to illustrate the role of cellular division (mitosis) and differentiation in producing and maintaining complex organisms | Biology TB, notes, slideshows | Cell cycle, interphase, mitosis, cytokinesis, chromosome, chromatin, Prophase, sister chromatid, centromere, spindle apparatus, metaphase, anaphase, telophase, cancer, |
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QUARTER 2

Unit 4: Cellular Energy (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|--|-----------|--------------------------------------|
| - Photosynthesis Cellular Respiration | SCI.HS.LS1.5 Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy | | Photosynthesis, chloroplast, glucose |

Biology Curriculum Map 2021-2022



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|------------------------|--|--|---|---|
| - Cellular Respiration | | Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules | Biology (McGraw Hill) textbook, notes, notebook, labs | chloroplast, glucose, ATP, cellular respiration, fermentation |
| | | Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy | | |

Unit 5: Cycling of Matter/Flow of Energy(days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|-----------------------------|---|---|--|
| -carbon cycle | SCI.HS.LS2.3 Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions | | biosphere, hydrosphere, geosphere, atmosphere, element, carbon, phosphorus, nitrogen |
| -water cycle review | SCI.HS.LS2.4 Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem | Biology (McGraw Hill) textbook, notes, notebook, labs | |
| -nitrogen/phosphorus cycles | SCI.HS.LS2.5 Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere | | |
| | | | |

QUARTER 3

Unit 6: Genetics (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|--|---------------------------------------|--|
| - Review of DNA and its functions - meiosis - mutations - inherited traits | SCI.HS.LS3.1 Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring | Crash Course Biology | chromosomes, traits, inheritable, mutation |
| | SCI.HS.LS3.2 Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors | HHMI | |
| | SCI.HS.LS3.3 Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population | Explore Learning Readworks phET | |

Unit 7: Natural Selection/Evolution (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|---|-----------|--|
| - how do populations change over time? - evidence for evolution | SCI.HS.LS4.1 Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence | | natural selection, advantage, evolution, population, mutation, |

Biology Curriculum Map 2021-2022

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|------------------------|--------------|---|---|-----------------------------------|
| evidence for evolution | | Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment | Biology (McGraw Hill) textbook, notes, notebook, labs | population, mutation, competition |
| | SCI.HS.LS4.3 | Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait | | |
| | SCI.HS.LS4.4 | Construct an explanation based on evidence for how natural selection leads to adaptation of populations | | |
| | SCI.HS.LS4.5 | Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species | | |

QUARTER 4

Unit 8: Biodiversity and Carrying Capacity (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|--------------|---|--|
| - How can communities and ecosystems change over time? - population graphs - carrying capacity - human effects on the environment | SCI.HS.LS2.1 | Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales | carrying capacity, succession, exponential growth, population, community |
| | SCI.HS.LS2.2 | Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales | |
| | SCI.HS.LS2.6 | Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem | |
| | SCI.HS.LS2.7 | Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity | |
| | SCI.HS.LS2.8 | Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce | |
| | SCI.HS.LS4.6 | Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity | |

Schedule 7d: Curriculum

Social Studies

- DPSA Introduction Social Studies
- 9-12 Social Studies Pacing Guides with Standard Descriptions
- 9-12 Social Studies Curriculum Maps

Detroit Public Safety Academy



Social Studies Best Practice Framework

Social Studies Introduction

A Best Practice classroom is one that uses current research, follows district and state standards, and is student-centered, active, experimental, authentic, democratic, collaborative, rigorous and challenging.

In a best practice social studies classroom, students will have regular opportunities to:

- Investigate in-depth topics
- Exercise choice and responsibility when selecting independent topics for inquiry
- Explore open-ended questions that challenge student's thinking
- Be active participants in the classroom and in the wider community
- Involve students in both independent inquiry and cooperative learning
- Analyze multiple historical artifacts, including primary and secondary sources

The National Council of Social Studies recognizes Expectation of Excellence as the following:

Instruction emphasizes depth of development, of important ideas within appropriate breadth of topic coverage and focuses on teaching these important ideas for understanding appreciation and life application...The most effective teachers, select for emphasis, the most useful landmark

locations, the most representative case studies for the most inspiring models, the truly precedent-setting events and the concepts and principles that their students must know and be able to apply in lives outside of school.

(NCSS, 1994, p.163)

Using the state of Michigan High School Content Expectations (HSCE's) as a guide, the Social Studies Best Practices Committee structured this document to include research-based Big Ideas as it pertains to grade 9-12 Social Studies instructions.

The goal of this document is to provide teachers with an instrument that guides instruction and enriches student learning. It will provide examples of quality instruction in Social Studies classrooms. This document should be considered to be a Tier 1 level of instructional delivery when referencing the Response to Intervention (RtI) Model.

BIG IDEAS

Grades 9-12 Classrooms

Teachers will use a variety of strategies to implement Whole Group Instruction in order to introduce, revisit or expand concepts. This will be done using a variety of strategies such as mini-lessons, anchor charts, guided note-taking and interactive notebooks. Teachers will embed technology while doing whole group instruction. Examples include slideshow presentations, interactive whiteboard lessons/activities and video streaming.

Mini-lessons- short instructional pieces (10-15 minutes) focusing on a particular skill strategy or topic; the content of these lessons will be applied during independent and small group activities.

Anchor Charts – an anchor chart is a co-created visual representation of the group's thinking. These charts may include expected behaviors, definitions, or examples of strategies and skills and students' understanding. These may be in the form of Thinking Maps, lists, sticky note collections, etc., and are a visible resource for all students as well as a permanent record of students' learning.

Interactive notebooks- Interactive notebooks are used for class notes as well as for other activities where the student will be asked to express his/her own ideas and process the information presented in class. The purpose is to enable students to be creative, independent thinkers and writers.

Guided note-taking – discussion of what was read and which important points should be included in students' notes.

Teachers provide opportunities for students to work in small flexible groups. These groups are used to meet the specific needs of students. Students can be grouped based on level, student interest and/or student needs. Teachers would utilize small groups for simulations, pre-teaching activities, reteaching activities, and cooperative learning. Teachers may structure cooperative

learning groups in multiple ways including, but not limited to pair-share groups, jigsaws, three-minute review, etc.

Pair-Share groups- students are given questions and time to think about the topic: Each student is paired with another student and they are given time to discuss the topic before reporting back to the class.

Jigsaw groups- students are placed in smaller groups and asked to develop expertise on a particular topic. All groups then report back and teach peers about their given topic.

Three-Minute Review-teachers stop anytime during an interactive lesson and give pairs of teams three minutes to review what has been said, ask clarifying questions or answer questions.

Buddy Reading-teachers pair students according to reading ability in order to increase comprehension of the assigned text.

Pre-Teaching – involves the teacher providing a glimpse into upcoming lessons.

Cooperative Grouping – requires students working together to complete a task.

Reteaching to ensure students achieve mastery of content.

When reading in Social Studies, students will participate in both guided reading and read aloud of leveled text, current events and interpretations of maps, charts and graphs. They will also utilize strategies such as Thinking Maps, partner reads and responding before, during and after guided and independent reading.

Using secondary sources, such as biographies, newspaper articles, current events, textbooks and alternative views of history, students may gain a deeper understanding of a historical topic from multiple perspectives.

- Guided Reading – The teacher provides support for small groups of reading as they learn to use various reading strategies (e.g. context clues, letter and sound relationships, word structure and so forth).
- Thinking Maps – set of graphic organizing techniques used in classrooms. There are eight types of diagrams that correspond with eight different thinking processes. They are used to provide a common visual language to information structure, often put to use when students take notes.
- Partner Reads- allow students an opportunity to discuss and debate ideas and discover varying points of views. Students will also have the opportunity to take and defend a position.

In order to provide students with an opportunity to communicate their ideas, teachers will assign projects such as wax museums, presentations, think-pair-share, and role playing. Written communications will also be expressed through the use of response journals, reports, RAFT (Roll, Audience, Format and Topic) writing and essays.

Wax Museums- This strategy can be used throughout the year in various ways. As an example, during Black History Month students could be assigned various notable African Americans in history to research and create a presentation based on the figure's life and role in history. The intent of the wax museum is for the student to "become" that person in history.

Written Constructed Response Writing –practice answering these types of questions using an organizer.

Role- Students will be assigned a specific role. (Example: Colonist)

Format – The teacher will assign the format of the writing assignment. (Example: Letter)

DSIT- Draw what you Saw, Ink what you Think- reflection activities that use nonlinguistic representation to review content with a written description component.

Quick write - A strategy used to develop writing fluency, to build reflection into learning tasks and to assess student thinking in an informal manner. The strategy to ask learners to respond to open-ended questions or prompts posed by the teacher before, during or after reading activities.

Enrichment Projects – these projects will be based on grade level content. Some examples are:

- Illustrated timeline
- Scrapbook
- Journals
- Farcebook (farce of Facebook)
- ABC books

Think pair share- students are given questions and time to think about the set topic. Each student is then paired with another student and they are given time to discuss the topic before reporting to the class.

Social Studies teachers used assessments as a tool to guide instruction and curriculum. Teachers used the formative assessment process beginning with identifying clear targets, effective questioning, descriptive actionable feedback, student self-assessment and students as peer assessors.

Common Formative Assessments

Definition for common formative assessment- "An assessment typically created collaboratively by a team of teachers responsible for the same grade level or course. Common formative assessment are frequently administered throughout the year to identify (1) individual students who need additional time and support for learning; (2) the teaching strategies most effective in helping students acquire the intended knowledge and skills; (3) program concerns-areas in which students generally are having difficulty achieving the intended standard and; (4) improvement goals for individual teachers and the team." (Dufour, et.al., p 214, 2006)

Teachers will use a variety of formative assessment tools to gather evidence including listed examples below.

- DSIT – Draw what you Saw Ink what you Think- student reflection activity that uses non-linguistic representation to review content with a written description component. This activity allows students to consider a written description a visual cue.
- Quick Writes – student-timed writing activity to review and summarize content: encouraging students to develop writing stamina and fluency over time.
- Thumbs up, thumbs down – Teachers ask students a question where they respond with a thumbs up if they agree and thumbs down if they disagree.
- Chalk talks – Students are separated into groups. Each group is given a large piece of paper with a big idea or question. Students are expected to silently answer the question on the paper. Each student has a different color writing utensil to write their response, leaving others to respond, add to the question or pose their own question.
- Peer feedback – Allow students to provide their peers with constructive criticism on a task by addressing the students’ strengths and providing suggestions of opportunities for improvement.
- Ticket out the door – is written during the last few minutes of the class period and handed to the teacher on the way out of the classroom. The teacher can quickly skim through the summaries to determine what, if anything needs to be re-taught the following day. This can also be done using other writing forms including drawings and diagrams.

<http://teachingstrategies.pbworks.com/w/page/19940839/Ticket%20Out%20the%20Door>

- Simulations – Guided reenactments where students become part of the story as a character instead of a listener and observer.
- Jigsaw – Each student is assigned a section of reading and is responsible for becoming an “expert” on their section. The student then meets with other classmates where everyone shares out on their section, allowing students to learn about the entire piece without reading every section themselves.

<http://www.creativeteachingsite.com/edusims.html>

http://www.educationworld.com/a_curr/curr324.shtml

- Formative assessment
<http://www.amle.org/Publications/WebExclusive/Assessment/tabid/1120/Default.aspx>
- Rubrics <http://edtech.kennesaw.edu/intech/rubrics.htm>

Common Summative Assessments are given periodically to determine after instruction is provided, what students know and do not know. Summative assessment in the classroom level is an accountability measure that is generally used as part of the grading process. Examples of common summative assessments include:

- State assessments
- District benchmark or interim assessments
- End-of-unit or chapter tests
- End-of-term or semester exams

Teachers will give students opportunities to exercise choice and responsibility in their Social Studies class. They will give students multiple alternative options to demonstrate learning, such as persuasive writing, working in centers and performing a culminating activity. Teachers will use menus for project decisions with rubrics for assessment. Students will be given a choice in selecting writing/debate topics. Grouping decisions can be flexible, while making student choice a priority. At times, students will be offered structured choices regarding assignments

- Center Work – Students spend quality, independent practice time reading and using a variety of maps. They also practice using globes, grids and the tools of geography. At the end of a unit students could choose a particular event or topic to display their knowledge.
- Projects/menu activities – these projects are grade level content based. Some examples include:
 - Illustrated timeline
 - Scrapbook
 - Journals
 - Farcebook (farce of facebook)
 - ABC books
 - DSIT- Draw what you Saw Ink what you Think – student reflection activity that used non-linguistic representation to review content with a written description component. This activity allows students to consider a written description of a visual cue.
 - Flexible grouping – Grouping students in ways that maximizes individual capabilities by pairing them up with students at the same ability and skill level.

<http://www.eduplace.com/science/profdev/articles/valentino.html>

<http://kms.sdcoe.net/differ/21-DSY/56-DSY.htm> (teacher led groups and student led groups)

- Debate – provide an opportunity for two or more students to present an argument with the goal of persuading one another. Students will learn to distinguish between important and vital facts versus the unimportant and analyze this information in a short period of time. Debate topics can be taken from curriculum, current events and social studies Big Ideas.

http://www.educationworld.com/a_lesson/lesson/lesson304.shtml

http://triviumpursuit.com/speech_debate/what_is_debate.htm

Real-world involvement is crucial for imparting the values of civic involvement and responsibility. Students may analyze current events, utilize her order thinking and develop service-learning projects to emphasize these values. Teachers through the use of current events via simulations, maps, graphs and debates, will apply concepts for authentic instruction. In order to make concepts more real, teachers work with students to make the connections between classroom instruction and real world events by determining how past events affect current life. Teachers may use strategies such as:

Field Trips or Virtual Field Trips-

Teachers arrange a field trip or virtual field trip opportunities for students to gain real world experiences. In order to make concepts more real, teachers have the students respond how a past event affects current life, promoting connections between classroom instruction and real world events. Teachers, through the use of current events utilizing simulations, maps, graphs and debates, will apply concepts for authentic instruction.

Real-world involvement is crucial for imparting the values of civic involvement and responsibility. Students may analyze current events, utilize higher order thinking and develop service-learning projects to learn these values. Teachers may use strategies such as:

Providing students' access to current events –allows students to have the opportunity to read, discuss, debate, draw their own conclusions, make connections and inferences through multiple venues.

<http://www.lessonplanspage.com/SSCurrentEventsBlogK12.htm>

Debate – provide an opportunity for two or more students to present an argument with the goal of persuading one another. Students will learn to distinguish between important and vital facts versus the unimportant and analyze this information in a short period of time. Debate topics can be taken from curriculum, current events and social studies Big Ideas.

Simulation – Guided reenactments where students take an active role of that as a participant instead of a listener and observer.

<http://www.creativeteachingsite.com/edusims.html>

Current event- Exposing students to current events via newspapers or digital media, to increase awareness and interest in current events by allowing them to make connections to the curriculum and relevance of the information.

Maps, Charts, Graphs – Analyzing data in graphs and charts along with maps, to help students interpret information in forms other than text. This will allow students to categorize real world

application in a manner that will allow them to quantify data and use standardized test questions that require map, graph and chart interpretation.

StrataLogica – Herff Jones Nystrom maps, globes, atlases and charts now come alive in an environment where teachers and students can actively engage in a multi-layered world, easily share content and collaborate with each other. StrataLogica is web-based and designed for computers, projectors and interactive whiteboards.

Teachers will give students opportunities to solve problems in their Social Studies classes. Problem solving skills are crucial in decision-making activities. Teachers can use simulation activities, debates and alternative ending activities (e.g., what if the South won the Civil War? What if the Agricultural Revolution had not happened?) to demonstrate individual student's problem solving skills.

After covering a historical event (e.g. end of war or passing a law), teachers and students can construct a list of pros and cons of the event and offer alternate solutions, if the event would have taken place in the present time.

- Debate – provide an opportunity for two or more students to present an argument with the goal of persuading one another. Students will learn to distinguish between important and vital facts versus the unimportant and analyze this information in a short period of time. Debate topics can be taken from curriculum, current events and social studies Big Ideas.
- Simulation – Guided reenactments where students take an active role of that as a participant instead of a listener and observer.
- Thinking Maps – set of graphic organizing techniques used in classrooms. There are eight types of diagrams that correspond with eight different thinking processes. They are used to provide a common visual language to information structure. They are often put to use when students take notes.

<http://www.thinkingmaps.com>



2021-22 Quarterly Pacing Guide

| High School | United States History and Geography (USH) HSCEs | Q1 | Q2 | Q3 | Q4 |
|-------------|--|----|----|----|----|
| USHG-F | Foundational Issues in USHG – ERAS 1 – 5 | | | | |
| USHG-F1 | Political and Intellectual Transformations of America to 1877 | | | | |
| USHG-F1.1 | <p>Identify the core ideals of American society as reflected in the documents below, and analyze the ways that American society moved toward and/or away from its core ideals:</p> <ul style="list-style-type: none"> • the Declaration of Independence. • the original United States Constitution (including the Preamble). • the Bill of Rights. • the Gettysburg Address. • the Thirteenth, Fourteenth, and Fifteenth Amendments. | P | | | |
| USHG-F1.2 | Using the American Revolution, the creation and adoption of the Constitution, and the Civil War as touchstones, develop an argument about the changing character of American political society and the roles of key individuals across cultures in prompting/supporting the change. | | | | |
| USHG-F1.3 | Analyze how the changing character of American political society from 1791 to 1877 had significant impact on the responsibilities of governments through the principle of federalism. | | | | |
| USH6 | USHG ERA 6 – THE DEVELOPMENT OF AN INDUSTRIAL, URBAN, AND GLOBAL UNITED STATES (1870 -1930) | | | | |
| USH6.1 | Growth of an Industrial and Urban America | | | | |
| USH6.1.1 | <p>Factors in the American Second Industrial Revolution – analyze the factors that enabled the United States to become a major industrial power, including:</p> <ul style="list-style-type: none"> • the organizational revolution. • the economic policies of government and industrial leaders. • the advantages of physical geography. • the increase in labor through immigration and migration. • the growing importance of the automobile industry. <p><i>Examples may include but are not limited to: the development of corporations and organized labor movements; A. Phillip Randolph, Andrew Carnegie and John D. Rockefeller.</i></p> | P | | | |
| USH6.1.2 | <p>Labor’s Response to Industrial Growth – evaluate the different responses of labor to industrial change, including the development of organized labor and the growth of populism and the populist movement.</p> <p><i>Examples may include but are not limited to: the Knights of Labor, American Federation of Labor, the United Mine Workers; Farmer’s Alliance, Grange, Platform for the Populist Party, Bryan’s “Cross of Gold” speech.</i></p> | P | | | |
| USH6.1.3 | <p>Urbanization – explain the causes and consequences of urbanization, including:</p> <ul style="list-style-type: none"> • the location and expansion of major urban centers and their link to industry and trade. • internal migration, including the Great Migration. • the development of cities divided by race, ethnicity, and class, as well as the resulting tensions among and within groups. • different perspectives about the immigrant experience. | P | | | |



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|-----------------|---|----|----|----|----|
| USH6.1.4 | Growth and Change – explain the social, political, economic, and cultural shifts taking place in the United States at the end of the 19th century and beginning of the 20th century, by: <ul style="list-style-type: none"> describing the developing systems of transportation (canals and railroads, including the Transcontinental Railroad), and their impact on the economy and society. describing governmental policies promoting economic development. evaluating the treatment of African Americans, including the rise of segregation in the South as endorsed by the Supreme Court's decision in Plessy v. Ferguson, and describing the response of African-Americans to this inequality. describing the policies toward Indigenous Peoples, including removal, reservations, the Dawes Act of 1887, and the response of Indigenous Peoples to these policies. | P | | | |
| USH6.2 | Becoming a World Power | | | | |
| USH6.2.1 | Growth of U.S. Global Power – describe how America redefined its foreign policy between 1890 and 1914 and analyze the causes and consequences of the U.S. emergence as an imperial power in this time period, using relevant examples of territorial expansion and involvement in foreign conflicts. | I | P | | |
| USH6.2.2 | World War I – explain the causes of World War I, the reasons for American neutrality and eventual entry into the war, and America's role in shaping the course of the war. | I | P | | |
| USH6.2.3 | Domestic Impact of World War I – analyze the domestic impact of World War I on the growth of the government, the expansion of the economy, the restrictions on civil liberties, the expansion of women's suffrage, and on internal migration. <i>Examples may include but are not limited to: War Industries Board, the growth of anti-immigrant sentiments, the Sedition Act, the Red Scare, the Palmer Raids.</i> | I | P | | |
| USH6.2.4 | Wilson and His Opponents – explain how President Woodrow Wilson's "Fourteen Points" differed from proposals by others, including French and British leaders and domestic opponents, in the debate over: <ul style="list-style-type: none"> the Treaty of Versailles. U.S. participation in the League of Nations. the redrawing of European political boundaries and the resulting geopolitical tensions that continued to affect Europe. | I | P | | |
| USH6.3 | Progressive Era | | | | |
| USH6.3.1 | Describe the extent to which industrialization and urbanization between 1895 and 1930 created the need for progressive reform. <i>Examples may include but are not limited to: urban and rural poverty, child labor, immigration, political corruption, racial and gender discrimination, public health, unsafe living conditions, poor working conditions, monopolies, unfair labor practices.</i> | I | P | | |
| USH6.3.2 | Analyze the social, political, economic, and cultural changes that occurred during the Progressive Era. Examples may include but are not limited to: the successes and failures of efforts to expand women's rights, including the work of important leaders such as Susan B. Anthony, Elizabeth Cady Stanton, Alice Paul; the role of reform organizations and movements and individuals in promoting change; the Women's Christian Temperance Union; settlement house movement; conservation movement; the National Association for the Advancement of Colored People; Carrie Chapman Catt; Eugene Debs; W.E.B. DuBois; Upton Sinclair; Ida Tarbell; major changes in the Constitution, including Sixteenth, Seventeenth, Eighteenth, and Nineteenth Amendments; the Supreme Court's role in supporting or slowing reform; new regulatory legislation; the Pure Food and Drug Act; the Sherman and Clayton Antitrust Acts; the successes and failures of the Indian Citizenship Act of 1924. | I | P | | |
| USH6.3.3 | Evaluate the historical impact of the Progressive Era with regard to governmental and industrial reforms. | I | P | | |
| USH6.3.4 | Women's Suffrage – Analyze the successes and failures of efforts to expand women's rights, including the work of important leaders and the eventual ratification of the Nineteenth Amendment. | | | | |
| USH7 | USHG ERA 7– THE GREAT DEPRESSION AND WORLD WAR II (1920 -1945) | | | | |
| USH7.1 | Growing Crisis of Industrial Capitalism and Responses | | | | |



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|-------------|---|----|----|----|----|
| USH7.1.1 | <p>The Twenties – explain and evaluate the significance of the social, cultural, and political changes and tensions in the “Roaring Twenties” including:</p> <ul style="list-style-type: none"> • cultural movements such as the Jazz Age, the Harlem Renaissance, and the “Lost Generation.” • the increasing role of advertising and its impact on consumer purchases. • the NAACP legal strategy to attack segregation. <p><i>Examples may include but are not limited to: the Scopes trial, views on and restrictions to immigration, Prohibition, roles of women, mass consumption, fundamentalism, modernism, the Indian Citizenship Act of 1924, the Carlisle Indian Industrial School, the Mount Pleasant Indian Industrial Boarding School, Harbor Springs Indian Boarding School, the resurgence of the Ku Klux Klan, and nativism.</i></p> | | | P | |
| USH7.1.2 | <p>Causes and Consequences of the Great Depression – explain and evaluate the multiple causes and consequences of the Great Depression by analyzing:</p> <ul style="list-style-type: none"> • the political, economic, environmental, and social causes of the Great Depression, including fiscal policy, overproduction, underconsumption, speculation, the 1929 crash, and the Dust Bowl. • the economic and social toll of the Great Depression, including unemployment and environmental conditions that affected farmers, industrial workers, and families. • President Herbert Hoover’s policies and their impact, including the Reconstruction Finance Corporation. | | | P | |
| USH7.1.3 | <p>The New Deal Era – explain and evaluate President Franklin Roosevelt’s policies and tactics during the New Deal era, including:</p> <ul style="list-style-type: none"> • the changing role of the federal government’s responsibilities to protect the environment, meet challenges of unemployment, and to address the needs of workers, farmers, Indigenous Peoples, the poor, and the elderly. • opposition to the New Deal and the impact of the Supreme Court in striking down and then accepting New Deal laws. • the impact of the Supreme Court on evaluating the constitutionality of various New Deal policies. • consequences of New Deal policies. <p><i>Examples may include but are not limited to: Frances Perkins, the Dust Bowl and the Tennessee Valley, promoting workers’ rights, development of a Social Security program, banking and financial regulation, conservation practices, crop subsidies, the Indian Reorganization Act (IRA), the Termination Policy, the Deportation Act of 1929 Federal housing policies and agricultural efforts (AAA) and impacts on housing for marginalized groups, Charles Coughlin, Huey Long.</i></p> | | | P | |
| USH7.2 | World War II | | | | |
| USH7.2.1 | <p>Causes of World War II – analyze the factors contributing to World War II in Europe and in the Pacific region, and America’s entry into war, including:</p> <ul style="list-style-type: none"> • political and economic disputes over territory. • the differences in the civic and political values of the United States and those of Nazi Germany and Imperial Japan. • U.S. neutrality. • the bombing of Pearl Harbor. <p><i>Examples may include but are not limited to: failure of the Treaty of Versailles; the League of Nations; the Munich Agreement; the Neutrality Acts; the Lend Lease Act; oil embargo; fascism; militarism, nationalism; imperialism.</i></p> | | | P | |
| USH7.2.2 | <p>United States and the Course of World War II – evaluate the role of the United States in fighting the war militarily, diplomatically, and technologically across the world.</p> <p><i>Examples may include but are not limited to: Germany-First strategy, the Big Three Alliance, and the development of atomic weapons.</i></p> | | | P | |

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|-------------|--|----|----|----|----|
| USH7.2.3 | <p>Impact of World War II on American Life – analyze the changes in American life brought about by U.S. participation in World War II, including:</p> <ul style="list-style-type: none"> • the mobilization of economic, military, and social resources. • the role of women, African Americans, and ethnic minority groups in the war effort, including the work of A. Philip Randolph and the integration of U.S. military forces. • the role of the home front in supporting the war effort. • the conflict and consequences around the internment of Japanese-Americans. | | | P | |
| USH7.2.4 | <p>Responses to Genocide – investigate the responses to Hitler’s “Final Solution” policy by the Allies, the U.S. government, international organizations, and individuals. <i>Examples may include but are not limited to: concentration camp liberation, Nuremberg war crimes tribunals, and actions by individuals such as Oskar Schindler and Irena Sendler as examples of the “righteous among the nations”.</i></p> | | | P | |
| USH8 | USHG ERA 8 – POST-WORLD WAR II UNITED STATES (1945-1989) | | | | |
| USH8.1 | Cold War and the United States | | | | |
| USH8.1.1 | <p>Origins and Beginnings of the Cold War – analyze the factors that contributed to the Cold War, including:</p> <ul style="list-style-type: none"> • differences in the civic, ideological, and political values, and in the economic and governmental institutions, of the United States and the Soviet Union (U.S.S.R.). • diplomatic and political actions by both the United States and the U.S.S.R. in the last years of World War II and the years afterward. <p><i>Examples may include but are not limited to: the differences between Communism and Capitalism, diplomatic decisions made at the Yalta and Potsdam conferences, the use of the atomic bomb, the Marshall Plan, Truman Doctrine, United Nations, North \ American Treaty Organization (NATO), and the Warsaw Pact.</i></p> | | | P | |
| USH8.1.2 | <p>Foreign Policy During the Cold War – compare the causes and consequences of the American policy of containment including:</p> <ul style="list-style-type: none"> • the development and growth of a U.S. national security establishment and intelligence community. • the direct and/or armed conflicts with Communism (for example, but not limited to: Berlin, Korea, Cuba). • U.S. involvement in Vietnam, and the foreign and domestic consequences of the war. • indirect (or proxy) confrontations within specific world regions. • the arms race and its implications on science, technology, and education. <p><i>Examples may include but are not limited to: the Department of Defense; the Department of State; the Central Intelligence Agency; direct conflicts within specific world regions, such as Chile, Angola, Iran, Guatemala, and Afghanistan; the relationship and conflicts with the Soviet Union and China; U.S. military policies and practices, special operations, and teams; the launch of Sputnik and the beginning of the space race; and the National Defense Education Act (NDEA).</i></p> | | | P | |
| USH8.1.3 | <p>End of the Cold War – describe the factors that led to the end of the Cold War. <i>Examples may include but are not limited to: detente, policies of the U.S. and U.S.S.R. and their leaders President Reagan and Premier Gorbachev, the political breakup of the Soviet Union, and the Warsaw Pact.</i></p> | | | P | |
| USH8.2 | Domestic Policies | | | | |
| USH8.2.1 | <p>Demographic Changes – use population data to produce and analyze maps that show the major changes in population distribution and spatial patterns and density, including the Baby Boom, new immigration, suburbanization, reverse migration of African-Americans to the South, the Indian Relocation Act of 1956, and the flow of population to the Sunbelt.</p> | | | | P |



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| USH8.2.2 | <p>Policy Concerning Domestic Issues – analyze major domestic issues in the post-World War II era and the policies designed to meet the challenges by:</p> <ul style="list-style-type: none"> • describing issues challenging Americans, such as domestic anticommunism (McCarthyism), labor, poverty, health care, infrastructure, immigration, and the environment. • evaluating policy decisions and legislative actions to meet these challenges. <p><i>Examples may include but are not limited to: G.I. Bill of Rights (1944), Taft-Hartley Act (1947), Twenty-Second Amendment to the U.S. Constitution (1951), Federal Highways Act (1956), National Defense Act (1957), EPA (1970).</i></p> | | | | P |
| USH8.2.3 | Comparing Domestic Policies – focusing on causes, programs, and impacts, compare and contrast President Franklin Roosevelt's New Deal initiatives, President Lyndon Johnson's Great Society programs, and President Ronald Reagan's market-based domestic policies. | | | | P |
| USH8.2.4 | <p>Domestic Conflicts and Tensions – analyze and evaluate the competing perspectives and controversies among Americans generated by U.S. Supreme Court decisions, the Vietnam War, the environmental movement, the movement for Civil Rights (See U.S. History Standards 8.3) and the constitutional crisis generated by the Watergate scandal.</p> <p><i>Examples may include but are not limited to: Roe v. Wade, Gideon v. Wainwright, Miranda v. Arizona, Tinker v. Des Moines, Hazelwood v. Kuhlmeier, Kent State, Students for a Democratic Society (SDS), Robert McNamara, Martin Luther King Jr., Muhammad Ali, "flower power," hippies, beatniks, Rachel Carson, Winona LaDuke, the American Indian Movement (AIM), the occupation of Alcatraz, Ralph Nader.</i></p> | | | | P |
| USH8.3 | Civil Rights in the Post WWII Era | | | | |
| USH8.3.1 | <p>Civil Rights Movement – analyze key events, ideals, documents, and organizations in the struggle for African-American civil rights including:</p> <ul style="list-style-type: none"> • the impact of World War II and the Cold War. • Responses to Supreme Court decisions and governmental actions. • the Civil Rights Act (1964). • protest movements. • rights. • organizations. • civil actions. <p><i>Examples may include but are not limited to: racial and gender integration of the military; "An American Dilemma"; Jim Crow laws; de jure segregation; Brown v. Board of Education; the Civil Rights Act (1957); Little Rock school desegregation; the Civil Rights Act (1964); the Voting Rights Act (1965); the integration of baseball; Montgomery Bus Boycott (1955-1956); March on Washington; the Freedom Rides; the National Association for the Advancement of Colored People; the Southern Christian Leadership Conference; the Student Non-violent Coordinating Committee; the Nation of Islam; the Black Panthers; Orval Faubus; Rosa Parks; sit-ins; James Meredith; Medgar Evers; Fannie Lou Hamer; Malcolm X; Yuri Kochiyama; the Twenty-Fourth Amendment; violence in Birmingham; Milliken v. Bradley; the Elliott Larsen Act.</i></p> | | | | P |
| USH8.3.2 | Ideals of the Civil Rights Movement – compare and contrast the ideas in Martin Luther King's March on Washington speech to the ideas expressed in the Declaration of Independence, the Seneca Falls Resolution, and the Gettysburg Address. | | | | P |
| USH8.3.3 | Women's Rights – analyze the causes, course, and reaction to the women's rights movement in the 1960s and 1970s. <i>Examples may include but are not limited to: the role of population shifts; birth control; increasing number of women in the work force; National Organization for Women (NOW); Equal Rights Amendment (ERA); Betty Friedan; and Phyllis Schlafly.</i> | | | | P |
| USH8.3.4 | <p>Civil Rights Expanded – evaluate the major accomplishments and setbacks in securing civil rights and liberties for all Americans over the 20th century.</p> <p><i>Examples may include but are not limited to: Indigenous Peoples; Latinos/ Latinas; new immigrants; people with disabilities; the gay and lesbian community; the Stonewall riots; the Rehab Act (1973); ADA (1990); American Indian Religious Freedom Act (1978); United Farmworkers; Harvey Milk (1978); Ruth Ellis; the Indian Civil Rights Act (1968).</i></p> | | | | P |

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|---------------|--|----------|----------|-----------|-----------|
| USH8.3.5 | Tensions and Reactions to Poverty and Civil Rights – analyze the causes and consequences of the civil unrest that occurred in American cities, by comparing civil unrest in Detroit with at least one other American city. <i>Examples may include but are not limited to: Los Angeles, Cleveland, Chicago, Atlanta, Newark.</i> | | | | P |
| USH9 | USHG ERA 9 – AMERICA IN A NEW GLOBAL AGE | | | | |
| USH9.1 | Impact of Globalization on the United States | | | | |
| USH9.1.1 | Economic Changes – using the changing nature of the American automobile industry as a case study, evaluate changes in the American economy created by new markets, natural resources, technologies, corporate structures, international competition, new sources/methods of production, energy issues, and mass communication. | | | | P |
| USH9.1.2 | Transformation of American Politics – analyze the transformation of American politics in the late 20th and early 21st centuries, including: <ul style="list-style-type: none"> • the growth of the conservative movement in national politics, including the role of Ronald Reagan. • the role of evangelical religion in national politics. • the intensification of partisanship. • the partisan conflict over the role of government in American life. • the role of regional differences in national politics. | | | | P |
| USH9.2 | Changes in America’s Role in the World | | | | |
| USH9.2.1 | United States in the Post-Cold War World – explain the role of the United States as a superpower in the post-Cold War world, including advantages, disadvantages, and new challenges. <i>Examples may include but are not limited to: military missions in Lebanon, Somalia, Haiti, Bosnia, Kosovo, and the Gulf War.</i> | | | | P |
| USH9.2.2 | 9/11 and Responses to Terrorism – analyze how the attacks on 9/11 and the response to terrorism have altered American domestic and international policies. <i>Examples may include but are not limited to: the Office of Homeland Security, Patriot Act, wars in Afghanistan and Iraq, role of the United States in the United Nations, NATO.</i> | | | | P |
| USH9.3 | Policy Debates | | | | |
| USH9.3.1 | Make a persuasive argument on a public policy issue, and justify the position with evidence from historical antecedents and precedents, and Democratic Values or Constitutional Principles. | | | | P |
| | New Standards: | 8 | 7 | 10 | 14 |
| | Review Standards: | 0 | 0 | 0 | 0 |



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|----------------|--|----|----|----|----|
| C-1 | CONCEPTUAL FOUNDATIONS OF CIVIC AND POLITICAL LIFE | | | | |
| C 1.1 | Philosophical Foundations of Civic Society and Government | | | | |
| C 1.1.1 | Describe, compare, and contrast political philosophers views on purposes of government(s) including but not limited to Aristotle, Locke, Hobbes, Montesquieu, and Rousseau. | P | | | |
| C 1.1.2 | Identify, provide examples of, and distinguish among different systems of government by analyzing similarities and differences in sovereignty, power, legitimacy, and authority. Examples may include but are not limited to: anarchy, dictatorship, democracy, monarchy, oligarchy, republic, theocracy, military junta, socialist, and tribal governments. | P | | | |
| C 1.1.3 | Compare, contrast, and evaluate models of representation in democratic governments including presidential and parliamentary systems. Examples may include but are not limited to: direct democracy, constitutional democracy, constitutional republic, representative democracy, indirect democracy/ republic. | P | | | |
| C 1.1.4 | Compare and contrast federal, confederal, and unitary systems of government by analyzing similarities and differences in sovereignty and distribution of governmental powers. | P | | | |
| C-2 | FOUNDING AND DEVELOPMENT OF THE GOVERNMENT OF THE UNITED STATES OF AMERICA | | | | |
| C 2.1 | Origins of the American Constitutional Government | | | | |
| C 2.1.1 | Analyze the historical and philosophical origins of American Constitutional Democracy and analyze the influence of ideas found in the Magna Carta, Declaration of Independence, Articles of Confederation, and John Locke's Second Treatise. Examples may include but are not limited to: the Iroquois Confederation, English Bill of Rights, Mayflower Compact, Northwest Ordinance, Virginia Statute for Religious Freedom, Montesquieu's Spirit of Laws, Paine's Common Sense, Aristotle's Politics, and select Federalist Papers (10th, 14th, and 51st). | P | | | |
| C 2.1.2 | Identify and analyze various Democratic Values of the United States as found in the Declaration of Independence. Examples of Democratic Values may include but are not limited to: justice, unalienable rights (life, liberty, pursuit of happiness), and equality. Analysis may include but is not limited to: how might the ideals in the Declaration have been in tension with reality? | P | | | |
| C 2.1.3 | Explain the impact of the major debates and compromises underlying the drafting and ratification of the American Constitution including the Virginia and New Jersey plans, the Great Compromise, debates between Federalists and AntiFederalists, debates concerning slavery, and the promise for a Bill of Rights after ratification. | P | | | |
| C 2.2 | Democratic Values and U.S. Constitutional Principles | | | | |
| C 2.2.1 | Analyze relationships between Democratic Values and Constitutional Principles. Examples may include but are not limited to: ways in which the Constitutional Principle of due process of laws correlates with the Democratic Value of justice, ways in which the Constitutional Principle of equal protection of the law correlates with the Democratic Value of equality. | P | | | |
| C 2.2.2 | Analyze how influential historical speeches, writings, cases, and laws express Democratic Values and influenced changes in American culture, law, and the Constitution. Examples may include but are not limited to: equality; drawing upon Martin Luther King's "I Have a Dream" speech and "Letter from Birmingham City Jail"; the Universal Declaration of Human Rights; the Declaration of Sentiments; the Equal Rights Amendment; and Dred Scott v. Sandford, Plessy v. Ferguson, Loving v. Virginia, the Americans With Disabilities Act, and Obergefell v. Hodges. | P | | | |
| C 2.2.3 | Use examples to investigate why people may agree on Democratic Values and Constitutional Principles in the abstract, yet disagree over their meaning when they are applied to specific situations. Examples may include but are not limited to: liberty and authority/order, justice and equality, individual rights and the common good. | P | | | |



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|----------------|--|----|----|----|----|
| C 3 | STRUCTURE AND FUNCTIONS OF GOVERNMENT IN THE UNITED STATES OF AMERICA | | | | |
| C 3.1 | Structure, Functions, Powers and Limits of Federal Government | | | | |
| C 3.1.1 | Identify and describe the purposes, organization, powers, processes, and election of the legislative branch as enumerated in Article I of the Constitution. <i>Examples may include but are not limited to: the House of Representatives and Senate (including election and qualifications to hold office), advise and consent, impeachment, power of the purse, approval of treaties, and war powers.</i> | P | | | |
| C 3.1.2 | Identify and describe the purposes, organization, powers, processes, and election of the executive branch as enumerated in Article II of the Constitution. <i>Examples may include but are not limited to: the President (including election and qualifications to hold office), Commander-in-Chief, appointment power, presidential pardon, executive departments, due care (faithful execution of the laws) clause, independent regulatory agencies, treaty negotiations, veto power, electoral college, Twenty-fifth Amendment.</i> | P | | | |
| C 3.1.3 | Identify and describe the purposes, organization, powers, processes, and appointment or election of the judicial branch as enumerated in Article III of the Constitution and as established in Marbury v. Madison. <i>Examples may include but are not limited to: the Supreme Court (nomination and appointment process, lifetime tenure), original and appellate jurisdictions, resolution of disputes.</i> | P | | | |
| C 3.1.4 | Examine and evaluate the effectiveness the role of separation of powers and checks and balances in regard to the distribution of power and authority between the three branches of government. <i>Examples may include but are not limited to: advise and consent, power of the purse, veto power, judicial review, war powers, treaty negotiation and approval, the necessary and proper clause, and impeachment.</i> | P | | | |
| C 3.1.5 | Analyze the various levels and responsibilities in the federal and state judicial systems and explain the relationships among them. | P | | | |
| C 3.1.6 | Evaluate major sources of revenue and major expenditures of the federal government. <i>Examples may include but are not limited to: discretionary spending, federal income tax, and mandatory spending.</i> | P | | | |
| C 3.1.7 | Identify and explain how Supreme Court decisions and provisions in the U.S. Constitution have impacted the power of the federal government. <i>Examples may include but are not limited to: the Bill of Rights, rule of law, enumerated powers, implied powers, federalism, and McCulloch v. Maryland.</i> | P | | | |
| C 3.2 | Structure and Functions of State, Local and Tribal Governments | | | | |
| C 3.2.1 | Describe limits the U.S. Constitution places on powers of the states and on the federal government's power over the states. <i>Examples of limits on state power include but are not limited to: prohibitions against coining money, impairing interstate commerce, making treaties with foreign governments.</i> <i>Examples of limits on federal power over states include but are not limited to: federal government cannot abolish a state; Tenth Amendment reserves powers to the states; federal government cannot commandeer state employees.</i> | P | | | |
| C 3.2.2 | Explain interactions and tensions among federal, state, and local governments using the necessary and proper clause, the Commerce Clause, and the Tenth Amendment. | P | | | |
| C 3.2.3 | Describe how state, local, and tribal governments are organized, their major responsibilities, and how they affect the lives of people residing in their jurisdiction(s). | P | | | |
| C 3.2.4 | Analyze sovereignty of tribal governments in interactions with U.S. governments, including treaty formation, implementation, and enforcement between federal, state, and local governments and tribal governments. | P | | | |
| C 3.2.5 | Evaluate the major sources of revenue and expenditures for state, local, and tribal governments. | P | | | |



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|----------------|--|----|----|----|----|
| C 3.2.6 | Describe and evaluate referendums, initiatives, and recall as mechanisms used to influence state and local government. Use a case study to examine the impact of one such listed mechanism. | | | | |
| C 3.3 | Additional Actors and Influences in American Civic Society | | | | |
| C 3.3.1 | Describe and analyze how groups and individuals influence public policy. <i>Examples may include but are not limited to: political action committees, voluntary organizations, professional organizations, civic organizations, media.</i> | P | | | |
| C 3.3.2 | Describe the evolution of political parties and their contemporary influence on public policy. | P | | | |
| C 3.3.3 | Explain the concept of public opinion, factors that shape it, and contrasting views on the role it should and does play in public policy. | P | | | |
| C 3.3.4 | Explain the significance of campaigns and elections in American politics, current criticisms of campaigns, and proposals for their reform. | P | | | |
| C 3.3.5 | Identify and discuss roles of non-governmental organizations in American civic society. | P | | | |
| C 3.3.6 | Explain functions and possible influence of various news and other media sources in political communication. <i>Examples may include but are not limited to: television, print, press, Internet (including social media), radio.</i> | P | | | |
| C 3.3.7 | Analyze the credibility and validity of various forms of political communication. <i>Examples of analysis may include but are not limited to: logic, factual accuracy, selective omission, emotional appeal, distorted evidence, appeals to bias or prejudice, confirmation and source bias.</i> | P | | | |
| C 4 | RIGHTS AND LIBERTIES IN THE UNITED STATES OF AMERICA | | | | |
| C 4.1 | Application of the Bill of Rights | | | | |
| C 4.1.1 | Describe the five essential rights protected by the First Amendment. Through the use of court cases and examples, explore and analyze the scope and limits of First Amendment rights. <i>Examples may include but are not limited to: Schenck v. United States, Brandenburg v. Ohio, Tinker v. Des Moines Independent Community School District, Bethel School District v. Fraser, Hazelwood School District v. Kuhlmeier, Texas v. Johnson, New York Times Co. v. United States, Village of Skokie v. National Socialist Party, Minersville School District v. Gobitis, West Virginia State Board of Education v. Barnette, Engel v. Vitale, Lemon v. Kurtzman, Wisconsin v. Yoder, NAACP v. Alabama.</i> | | P | | |
| C 4.1.2 | Using the Fourth, Fifth, Sixth, Seventh, and Eighth Amendments, describe the rights of the accused; using court cases and examples, describe the limit and scope of these rights. <i>Examples may include but are not limited to: search and seizure, right to an attorney, due process, double jeopardy, right to speedy trial, right to impartial jury, right to witnesses, no cruel or unusual punishment. Court cases include, but are not limited to: Mapp v. Ohio, Katz v. United States, New Jersey v. T.L.O., Riley v. California, Gideon v. Wainwright, Miranda v. Arizona, Gregg v. Georgia.</i> | | P | | |
| C 4.2 | Extensions of Civil Rights and Civil Liberties | | | | |
| C 4.2.1 | Explain how the Civil War led to the creation of the Thirteenth, Fourteenth, and Fifteenth Amendments to the U.S. Constitution. Analyze each Amendment's relative effectiveness. | | P | | |
| C 4.2.2 | Explain how significant historical events, including but not limited to the suffrage movements and the civil rights movements, resulted in changes to the interpretation of and Amendments to the U.S. Constitution. <i>Examples may include but are not limited to: suffrage movements (Fifteenth, Nineteenth, Twenty-Third, Twenty-Fourth, Twenty-Sixth Amendments), and the civil rights movements (Twenty-Fourth, Twenty-Sixth Amendments).</i> | | P | | |



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| High School | Civics (C) | Q1 | Q2 | Q3 | Q4 |
|--------------|--|----|----|----|----|
| C 4.2.3 | Using the Fourteenth Amendment, describe the impact of the doctrine of incorporation, due process of law, and equal protection of law on the articulation and extension of rights. <i>Examples may include court cases and pieces of legislation that include but are not limited to: Civil Rights Act of 1964, Voting Right Act of 1965, Barron v. Baltimore, Slaughterhouse cases, Gitlow v. New York, Gideon v. Wainwright, Mapp v. Ohio, Meyer v. Nebraska, Griswold v. Connecticut, Roe v. Wade, Cantwell v. Connecticut, McDonald v. Chicago, Shelby County v. Holder, Obergefell v. Hodges, United States v. Wong Kim Ark.</i> | | P | | |
| C 4.3 | Examining Tensions and Limits on Rights and Liberties | | | | |
| C 4.3.1 | Identify and explain personal rights, political rights, and economic rights as well as how these rights might conflict. <i>Examples of personal rights include but are not limited to: freedom of thought, conscience, expression, association, movement and residence, privacy, personal autonomy, due process of law, free exercise of religion, and equal protection of the law. Examples of political rights include but are not limited to: freedom of speech, press, assembly, and petition; the right to vote and run for public office. Examples of economic rights include but are not limited to: acquire, use, transfer, and dispose of property; choose one's work, change employment, join labor unions and professional associations; establish and operate a business; copyright protection; enter into lawful contracts; just compensation for the taking of private property for public use.</i> | | | | |
| C 4.3.2 | Describe considerations, criteria, and examples that have been used to deny, limit, or extend protection of individual rights. <i>Examples may include but are not limited to: clear and present danger; time, place, and manner restrictions on speech; compelling government interest; security; libel or slander; public safety; and equal opportunity. Examples may include but are not limited to: Dred Scott, Plessy v. Ferguson, Korematsu v. United States.</i> | | | | |
| C 5 | THE UNITED STATES OF AMERICA AND WORLD AFFAIRS | | | | |
| C 5.1 | Formation and Implementation of U.S. Foreign Policy | | | | |
| C 5.1.1 | Identify and describe ways in which foreign policy is made including Constitutional powers of the executive, legislative, and judicial branches and how those powers have been clarified or interpreted over time. <i>Examples may include but are not limited to: Senate treaty ratification powers, Senate advise and consent of political appointments, Congressional declarations of war, War Powers Act of 1973, executive orders and related injunctions, power of the purse.</i> | | P | | |
| C 5.1.2 | Analyze past and present examples of U.S. foreign policy, its implementation, and its impact on American and international institutions and individuals. <i>Examples of policies may include but are not limited to: immigration policies, nuclear treaties, Paris Accords and climate change, war on terrorism, space treaties, privatization and militarism of space, the Spanish-American War, American isolationism, the Atlantic Charter, cold war containment, post-cold war policy, modern treaties, tariffs, trade wars, cyber-security, gag rules.</i> | | P | | |
| C 5.2 | U.S. Role in International Institutions and Affairs | | | | |
| C 5.2.1 | Analyze the influence and impact of U.S. political, economic, technological, and cultural developments on countries and people around the world. <i>Examples may include but are not limited to: foreign policy, popular culture, fashion, music, Democratic Values, Constitutional Principles, backlash.</i> | | P | | |
| C 5.2.2 | Analyze how international political, economic, technological, and cultural developments impact U.S. institutions and individuals. <i>Examples may include but are not limited to: multinational corporations, terrorism, regional organizations, trade, migration, human trafficking, telecommunications.</i> | | P | | |
| C 5.2.3 | Identify and evaluate the roles and responsibilities of the United States in international governmental organizations including bilateral and multilateral agreements. <i>Examples may include but are not limited to: the United Nations, North Atlantic Treaty Organization, Organization of American States, USMCA, Helsinki Accords, Antarctic Treaty, Most Favored Nation Agreements, Paris Climate Accords, and Nuclear Non-Proliferation Treaty.</i> | | P | | |



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| High School | Civics (C) | Q1 | Q2 | Q3 | Q4 |
|----------------|---|----|----|----|----|
| C 5.2.4 | Identify and evaluate international non-governmental organizations. <i>Examples may include but are not limited to: International Red Cross, Amnesty International, Doctors Without Borders.</i> | | | | |
| C 6 | CITIZENSHIP AND CIVIC PARTICIPATION IN THE UNITED STATES OF AMERICA | | | | |
| C 6.1 | Citizenship in the United States of America | | | | |
| C 6.1.1 | Describe and evaluate the requirements and process for becoming a citizen of the United States. | | P | | |
| C 6.1.2 | Explain how the United States has limited and expanded citizenship over time. <i>Examples may include but are not limited to: legislation, Constitutional Amendments.</i> | | P | | |
| C 6.1.3 | Compare and contrast rights and representation among U.S. people and citizens living in states, territories, federal districts, and on tribally governed land. <i>Examples may include but are not limited to: District of Columbia, Guam, Puerto Rico, Northern Mariana Islands, U.S. Virgin Islands, American Samoa, Tribal Governments.</i> | | P | | |
| C 6.2 | Rights and Responsibilities in Civic Society | | | | |
| C 6.2.1 | Using examples, explain the rights and responsibilities of U.S. citizens as well all people living in the United States. <i>Examples unique to citizens include but are not limited to*: voting in national, state, and local elections, serving as a juror, running for elected office. Examples for all persons living in the United States as lawful permanent residents include but are not limited to: serving in the armed forces, voting in local jurisdictions, serving on some local juries, registering to vote. Examples for all persons living in the United States include but are not limited to:</i> <ul style="list-style-type: none"> <i>• participating in public life.</i> <i>• participating in political life.</i> <i>• being informed about laws that govern society.</i> <i>• respecting and obeying just laws.</i> <i>• stay informed and attentive about public issues.</i> <i>• monitoring political leaders and governmental agencies.</i> <i>• assuming community leadership when appropriate.</i> <i>• paying taxes.</i> <i>• registering to vote and voting knowledgeably on candidates and issues.</i> <i>• performing public service.</i> <i>• assuming leadership when appropriate.</i> *incarceration is an exception in some states. | | P | | |
| C 6.3 | Dispositions for Civic Participation | | | | |
| C 6.3.1 | Explain the personal dispositions that contribute to knowledgeable and engaged participation in civic communities. <i>Examples may include but are not limited to: concern for the well-being of others, civility, respect for the rights of other individuals, respect for law, honesty, open-mindedness, negotiation and compromise, persistence, civic-mindedness, compassion, patriotism, courage, and tolerance for ambiguity.</i> | | | | |
| C 6.3.2 | Explain how informed members of society influence civic life. <i>Examples may include but are not limited to: obeying just law, disobeying unjust law, being informed and attentive to public issues, monitoring political leaders and governmental agencies, assuming leadership when appropriate, paying taxes, registering to vote and voting knowledgeably on candidates and issues, serving as a juror, serving in the armed forces, performing public service.</i> | | | | |
| C 6.4 | Civic Inquiry, Public Policy, Civic Action, and Public Discourse | | | | |
| C 6.4.1 | Explain and evaluate how people, individually or collectively, seek to bring the United States closer to its Democratic Values. | | | | |



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| High School | Civics (C) | Q1 | Q2 | Q3 | Q4 |
|-------------|--|-----------|-----------|----------|----------|
| C 6.4.2 | Identify, discuss, and analyze methods individuals and/or groups have chosen to attempt social and legal change. Assess the effects of civil disobedience, social movements, demonstrations, protests on society and law. <i>Examples may include but are not limited to: abolitionists, women's suffrage movement, Civil Rights movement, direct action, sit-down strikes, walk-outs.</i> | | | | |
| C 6.4.3 | Identify and describe a local, state, national, or international public policy issue; research and evaluate multiple solutions; analyze the consequences of each solution and propose, defend, and take relevant action to address or resolve the issue. <i>Considerations for research may include but are not limited to: primary and secondary sources, legal documents (Constitutions, court decisions, state law), nontext based information (oral speeches/presentations, political cartoons, campaign advertisements), and other forms of political communication (speeches and blogs).</i> <i>Considerations for analyzing credible sources may include but are not limited to: logical validity, factual accuracy and/or omission, emotional appeal, unstated assumptions, logical fallacies, inconsistencies, distortions, appeals to bias or prejudice, overall strength of argument.</i> | | | | |
| C 6.4.4 | Equip students with the skills and knowledge to explore multiple pathways for knowledgeable, civic engagement through simulations and/or realworld opportunities for involvement. <i>Examples may include but are not limited to: trials, school board meetings, congressional hearings, running for office, letters to the editor, political campaigns.</i> | | | | |
| | New Standards: | 50 | 46 | 0 | 0 |
| | Review Standards: | 0 | 0 | 0 | 0 |

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| High School | Economics (E) | Q1 | Q2 | Q3 | Q4 |
|----------------|---|----|----|----|----|
| E-1 | THE MARKET ECONOMY | | | | |
| E 1.1 | Individual, Business, and Government Decision Making | | | | |
| E 1.1.1 | Scarcity, Choice, Opportunity Costs, Incentives – using examples, explain how scarcity, choice, opportunity costs, and incentives affect decisions made by households, businesses, and governments. | | | P | |
| E 1.1.2 | Entrepreneurship – analyze the risks and rewards of entrepreneurship and associate the functions of entrepreneurs with alleviating problems associated with scarcity. | | | P | |
| E 1.1.3 | Marginal Analysis – weigh marginal benefits and marginal costs in decision making. | | | | |
| E 1.2 | Competitive Markets | | | | |
| E 1.2.1 | Institutions – describe the roles of various economic institutions and purposes they serve in a market economy. <i>Examples may include but are not limited to: banks, labor unions, markets, corporations, co-operatives, sole proprietorships, partnerships, and not-for-profit organizations.</i> | | | P | |
| E 1.2.2 | Market Structures – identify the characteristics of perfect competition, monopolistic competition, oligopoly, and monopoly market structures. <i>Examples may include but are not limited to: number of producers, similarity of products, barriers to entry, control over prices.</i> | | | P | |
| E 1.3 | Prices, Supply, and Demand | | | | |
| E 1.3.1 | Supply And Demand – use the laws of supply and demand to explain household and business behavior. <i>Examples may include but are not limited to: determinants of demand and determinants of supply.</i> | | | P | |
| E 1.3.2 | Price, Equilibrium, Elasticity, and Incentives – analyze how prices change through the interaction of buyers and sellers in a market, including the role of supply, demand, equilibrium, and elasticity, and explain how incentives (monetary and non-monetary) affect choices of households and economic organizations. | | | P | |
| E 1.4 | Role of Government in the Market | | | | |
| E 1.4.1 | Public Policy and the Market – analyze the impact of a change in public policy on consumers, producers, workers, savers, and investors. <i>Examples may include but are not limited to: an increase in the minimum wage, a new tax policy, a change in interest rates, or price controls on the quantity of a good or service.</i> | | | P | |
| E 1.4.2 | Government and Consumers – analyze the role of government in protecting consumers and enforcing contracts (including property rights), and explain how this role influences the incentives (or disincentives) for people to produce and exchange goods and services. | | | P | |
| E 1.4.3 | Government Revenue and Services – analyze the ways in which local and state governments generate revenue and use that revenue to supply public services. | | | P | |
| E 1.4.4 | Market Failure – explain the role for government in addressing both negative and positive externalities. <i>Examples may include but are not limited to: pollution, vaccinations, education, medical research, government/private partnerships.</i> | | | P | |
| E 1.4.5 | Consequences of Governmental Policy – assess the incentives for political leaders to implement policies that disperse costs widely over large groups of people and benefit small and politically powerful groups. <i>Examples may include but are not limited to: subsidies, tariffs, import quotas.</i> | | | P | |



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| High School | Economics (E) | Q1 | Q2 | Q3 | Q4 |
|----------------|--|----|----|----|----|
| E 1.4.6 | Price Controls – analyze the impact of price ceilings and price floors on the quantity of a good or service supplied and demanded in a market. | | | | |
| E 2 | THE NATIONAL ECONOMY OF THE UNITED STATES OF AMERICA | | | | |
| E 2.1 | Understanding National Markets | | | | |
| E 2.1.1 | Circular Flow and the National Economy – using the concept of circular flow, analyze the roles of and relationship between households, business firms, and government in the economy of the United States. | | | P | |
| E 2.1.2 | Economic Indicators – using a number of indicators, such as gross domestic product (GDP), per capita GDP, unemployment rates, and consumer price index, analyze the current and future state of an economy. | | | P | |
| E 2.2 | Role of Government in the United States Economy | | | | |
| E 2.2.1 | Government Involvement in the Economy – evaluate the three macroeconomic goals of an economic system (stable prices, low unemployment, and economic growth). | | | P | |
| E 2.2.2 | Government Revenue and Services – evaluate the ways in which the federal government generates revenue on consumption, income, and wealth, and uses that revenue to supply government services and public goods, and protect property rights. <i>Examples may include but are not limited to: parks and highways, national defense, social security, Medicaid, Medicare.</i> | | | P | |
| E 2.2.3 | Fiscal Policy and its Consequences – analyze the consequences (intended and unintended) of using various tax and spending policies to achieve macroeconomic goals of stable prices, low unemployment, and economic growth. | | | P | |
| E 2.2.4 | Federal Reserve and Monetary Policy – explain the roles and responsibilities of the Federal Reserve system and compare and contrast the consequences (intended and unintended) of different monetary policy actions of the Federal Reserve Board as a means to achieve macroeconomic goals of stable prices, low unemployment, and economic growth. | | | P | |
| E 3 | THE INTERNATIONAL ECONOMY | | | | |
| E 3.1 | Economic Systems | | | | |
| E 3.1.1 | Developing Nations – assess how factors such as availability of natural resources, investments in human and physical capital, technical assistance, public attitudes and beliefs, property rights, and free trade can affect economic growth in developing nations. | | | | P |
| E 3.1.2 | International Organizations and the World Economy – evaluate the diverse impact of trade policies of the World Trade Organization, World Bank, or International Monetary Fund on developing economies of Africa, Central America, or Asia, and on the developed economies of the United States and Western Europe. | | | | P |
| E 3.1.3 | Comparing Economic Systems – compare and contrast the characteristics, advantages, and disadvantages of traditional, command, market, and mixed economic systems. <i>Examples may include but are not limited to: GDP, inflation, unemployment.</i> | | | | P |
| E 3.1.4 | Impact of Transitional Economies – analyze the impact of transitional economies, such as in China and India, on the global economy in general and the American economy in particular. | | | | P |
| E 3.2 | Economic Interdependence – Trade | | | | |

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| High School | Economics (E) | Q1 | Q2 | Q3 | Q4 |
|----------------|---|----|----|----|----|
| E 3.2.1 | Absolute and Comparative Advantage – use the concepts of absolute and comparative advantages to explain why goods and services are produced in one nation or locale versus another. | | | | P |
| E 3.2.2 | Domestic Activity and World Trade – assess the impact of trade policies, monetary policy, exchange rates, and interest rates on domestic activity and world trade. <i>Examples may include but are not limited to: tariffs, quotas, export subsidies, product standards, other barriers.</i> | | | | P |
| E 3.2.3 | Exchange Rate and World Trade – analyze the effects on trade from a change in an exchange rate between two currencies. | | | | P |
| E 3.2.4 | The Global Economy and the Marketplace – analyze and describe how the global economy has changed the interaction of buyers and sellers. | | | | P |
| E 4 | PERSONAL FINANCE | | | | |
| E 4.1 | Decision Making | | | | |
| E 4.1.1 | Earning Income – conduct research regarding potential income and employee benefit packages, non-income factors that may influence career choice, benefits and costs of obtaining the necessary education or technical skills, taxes a person is likely to pay, and other possible sources of income. <i>Examples may include but are not limited to: interest, dividends, capital appreciation, income support from the government, social security.</i> | | | | P |
| E 4.1.2 | Buying Goods And Services – describe the factors that consumers may consider when purchasing a good or service, including the costs, benefits, and the role of government in obtaining the information. | | | | P |
| E 4.1.3 | Saving – identify the incentives people have to set aside income for future consumption, and evaluate the impact of time, interest rates, and inflation upon the value of savings. | | | | P |
| E 4.1.4 | Using Credit – evaluate the benefits, costs, and potential impacts of using credit to purchase goods and services. | | | | P |
| E 4.1.5 | Financial Investing – analyze the risks, expected rate of return, tax benefits, impact of inflation, role of government agencies, and importance of diversification when investing in financial assets. | | | | P |
| E 4.1.6 | Protecting and Insuring – assess the financial risk of lost income, assets, health, or identity, and determine if a person should accept the risk exposure, reduce risk, or transfer the risk to others by paying a fee now to avoid the possibility of a larger loss later. | | | | P |
| | New Standards: | | | | |
| | Review Standards: | | | | |



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| High School | World History and Geography (WHG) HSCEs | Q1 | Q2 | Q3 | Q4 |
|---------------|---|----|----|----|----|
| WHG-F | Foundations of High School World History and Geography | | | | |
| WHG-F1 | World Historical and Geographical Inquiry and Literacy Practices | | | | |
| WHG-F1 | <p>Explain and use disciplinary processes and tools from world history. These processes and tools include but are not limited to:</p> <ul style="list-style-type: none"> • framing questions to guide inquiry. • determining historical significance. • applying concepts of change over time, continuity, and multiple causes and consequences. • contextualizing evidence and historical phenomena under study. • explaining and applying different periodization schemes. • using and connecting different spatial frames (examples may include but are not limited to global, interregional, regional). • recognizing that perspectives are shaped by different experiences across time and space. • sourcing, analyzing, and corroborating multiple sources of evidence (examples may include but are not limited to primary and secondary; verbal and visual; in print, three-dimensional, and digital). • analyzing maps and graphs to understand large-scale movement, trends, and patterns. • using spatial reasoning to evaluate the role of human-environment interactions in history. • comparing and contrasting physical, political, economic, and cultural characteristics across time and space. | P | | | |
| WHG4 | WHG Era 4 – Expanding and Intensified Hemispheric Interactions, 300-1500 C.E./A.D. | | | | |
| WHG4.1 | Global or Cross-Temporal Expectations | | | | |
| WHG4.1.1 | <p>Growth and Interactions of World Religions – analyze the significance of the growth of and interactions between world religions.</p> <p><i>Examples may include but are not limited to: increasing trade between Islam and Christianity; the Crusades; tensions between Catholic and Orthodox Christianity; conflict and cooperation between Muslims, Christians, and Jews in medieval Spain; the influence of Islam and Christianity on African culture; influences of Islam and Hinduism in South Asia.</i></p> | P | | | |
| WHG4.1.2 | <p>Intensifying Trade Networks and Contacts – compare and contrast the development, interdependence, specialization, and importance of interregional land-based and sea-based trading systems both within and between societies.</p> <p><i>Examples may include but are not limited to: trans-Saharan trading in gold and salt; intensification of trade around the Indian Ocean; increasing trade and the growth of towns and cities in western Europe; the spread of the plague and significance of its consequences; networks of exchange in North, Central, and South America.</i></p> | P | | | |
| WHG4.2 | Interregional or Comparative Expectations | | | | |



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| High School | World History and Geography (WHG) HSCEs | Q1 | Q2 | Q3 | Q4 |
|-------------|---|----|----|----|----|
| WHG4.2.1 | Growth of Islam and Dar al-Islam (a country, territory, land, or abode where Muslim sovereignty prevails) – explain the significance of Islam in an interconnected Afro-Eurasia. <i>Examples may include but are not limited to: investigating geographic extent of Muslim empires; the artistic, scientific, technological, and economic features that developed in Muslim society through cultural interactions and exchanges; diverse religious traditions of Islam; the cultural, political, and economic influence of Dar al-Islam in Afro-Eurasia; the caliphate as both a religious and political institution.</i> | P | | | |
| WHG4.2.2 | Unification of Eurasia under the Mongols – analyze the significance of Mongol rule in Afro-Eurasia and the impact of the Mongol Empire's disintegration. <i>Examples may include but are not limited to: investigating geographic patterns of Mongol conquest and expansion; characteristics and consequences of the Pax Mongolica; revival of long-distance trading networks between China and the Mediterranean world.</i> | P | | | |
| WHG4.2.3 | Spheres of Interaction and Influence in the Americas – compare and contrast the diverse characteristics and interactions of peoples in the Americas. <i>Examples may include but are not limited to: case studies of the Maya, Aztec, Inca, Pueblo, and/or Eastern Woodland; the role of the environment in shaping different societies; goods exchanged between societies; shifting power and influence of groups in each region.</i> | P | | | |
| WHG5 | WHG Era 5 – The Emergence of the First Global Age, 15th to 18th Centuries | | | | |
| WHG5.1 | Global or Cross-Temporal Expectations | | | | |
| WHG5.1.1 | Emerging Global System – differentiate between the global systems of trade, migration, and political power from those in the previous era. <i>Examples may include but are not limited to: investigating the influence of mercantilism and capitalism; the role of sugar and silver in the global economy; movement of people, commodities, and ideas across the Atlantic basin; rising nationalism, militarism, and absolutism; emergence of European maritime power in Asia and land control in the Americas.</i> | | P | | |
| WHG5.1.2 | Diffusion of World Religions – evaluate the impact of the diffusion of world religions and belief systems on social, political, cultural, and economic systems. <i>Examples may include but are not limited to: investigating the expulsion of Muslims and Jews from Spain; Reformation and expansion of Christianity to the Americas; expansion of Islam to Southeast Asia; Sikhism's contribution to the Punjab area of South Asia; Buddhism's growth in East and Southeast Asia; Taoist and Confucian political influences; cases of religious syncretism (blending of beliefs and traditions); continuity of local, indigenous beliefs throughout the world.</i> | | P | | |
| WHG5.2 | Interregional or Comparative Expectations | | | | |
| WHG5.2.1 | Cultural Encounters and the Columbian Exchange – explain the demographic, environmental, and political consequences of European oceanic travel and conquest. <i>Examples may include but are not limited to: investigating the near-elimination of indigenous civilizations and peoples in the Americas; diet and population changes in Africa, Asia, and Europe; social stratification of peninsulares, creoles, mestizos, slaves, and Indigenous Peoples; ecological impact of exchanges of flora and fauna across the Atlantic.</i> | | P | | |



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| High School | World History and Geography (WHG) HSCEs | Q1 | Q2 | Q3 | Q4 |
|-------------|---|----|----|----|----|
| WHG5.2.2 | The Trans-Atlantic Slave Trade – analyze the causes and development of the Atlantic trade system with respect to the capture and sale of Africans, the creation of the gun-slave cycle, the Middle Passage, and forced migration of Africans to the Americas, the establishment of the plantation complex, and the rise of slave resistance in the New World. | | P | | |
| WHG5.2.3 | Afro-Eurasian Empires – compare and contrast the different ways governments expanded or centralized control across various parts of Afro-Eurasia, and analyze the consequences of these changes. Examples may include but are not limited to: case studies of political, economic, and cultural transformations in the Ottoman, Mughal, Safavid, Songhai, and Russian Empires, Ming and Qing Dynasties, and/or Tokugawa Shogunate. | | | | |
| WHG6 | WHG Era 6 – An Age of Global Revolutions, 18th Century-1914 | | | | |
| WHG6.1 | Global or Cross-Temporal Expectations | | | | |
| WHG6.1.1 | Global Revolutions – explain the characteristics, extent, and impact of the global revolutions, including but not limited to changes in economic and political systems, and shifts in relative political and military power. | | | P | |
| WHG6.1.2 | Worldwide Migrations and Population Changes – analyze the causes and consequences of shifts in world population and major patterns of long-distance migrations, including the impact of industrialism, imperialism, changing diets, and scientific advances. | | | P | |
| WHG6.1.3 | Increasing Global Interconnections – describe the increasing global interconnections and new global networks that resulted in the spread of major innovations in governance, economic systems, cultural traits, technologies, and commodities. <i>Examples may include but are not limited to: investigating constitutionalism, communism and socialism, republicanism, nationalism, capitalism, human rights, and secularization.</i> | | | P | |
| WHG6.2 | Interregional or Comparative Expectations | | | | |
| WHG6.2.1 | Comparing Political Revolutions and/or Independence Movements – compare and contrast the American Revolution, the French Revolution, and one other revolution or independence movement that occurred in a region external to Europe from the standpoint of political, economic, and social causes and consequences. <i>Examples may include but are not limited to: case studies of Chinese, Haitian, Mexican and/or other Latin American revolutions; others who fought for a new political order against oppression, like Tacky’s War in Jamaica in 1760, the rebellion of Tupac Amaru in 1780, or the Indian Rebellion of 1857.</i> | | | P | |
| WHG6.2.2 | Growth of Nationalism and Nation-States – compare and contrast the rise of nation-states in a western and non-western context. <i>Examples may include but are not limited to: case studies of Germany, Italy, Japan.</i> | | | P | |
| WHG6.2.3 | Industrialization – compare and contrast the causes and consequences of industrialization around the world, including social, economic, and environmental impacts. Examples may include but are not limited to: case studies of industrialization in Great Britain, Belgium, France, Germany, France, Russia, and/or Japan; effects on women and children; the rise of organized labor movements; the extent and consequences of urbanization. | | | P | |



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| High School | World History and Geography (WHG) HSCEs | Q1 | Q2 | Q3 | Q4 |
|-----------------|--|----|----|----|----|
| WHG6.2.4 | Imperialism – analyze the political, economic, and social causes and consequences of imperialism in different regions. <i>Examples may include but are not limited to: case studies of Japan (Meiji Restoration), Qing China, India, Egypt, Ethiopia and/or the Congo; encounters between imperial powers (Europe, Japan) and local people in India, Africa, Central Asia, and East Asia; the connection between imperialism and racism, including the social construction of race.</i> | | | P | |
| WHG7 | WHG Era 7 – Global Crisis and Achievement, 1900-1945 | | | | |
| WHG7.1 | Global or Cross-Temporal Expectations | | | | |
| WHG7.1.1 | Power and Resistance – describe the global reconfigurations and restructuring of political and economic relationships throughout the 20th century and to the present, including state-organized efforts to expand power and the role of resistance movements against such efforts. | | | I | P |
| WHG7.1.2 | Global Conflict – compare and contrast the nature, extent, and impact of modern warfare with warfare in the previous eras, including the roles of ideology, technology, and civilians. | | | I | P |
| WHG7.1.3 | Genocide in the 20th Century – differentiate genocide from other atrocities and forms of mass killing and explain its extent, causes, and consequences in the 20th century and to the present. | | | I | P |
| WHG7.1.4 | Technological, Scientific, and Cultural Exchanges – describe significant technological innovations and scientific breakthroughs in transportation, communication, medicine, and warfare and analyze how they both benefited and imperiled humanity. | | | I | P |
| WHG7.2 | Interregional or Comparative Expectations | | | | |
| WHG7.2.1 | World War I – explain the causes, characteristics, and long-term consequences of World War I, including the major decisions of the Versailles Treaty. <i>Examples may include but are not limited to: investigating effects of nationalism, industrialization, disputes over territory, systems of alliances, imperialism, the role of colonial peoples and militarism, total war ideology and the Armenian Genocide; distinctive characteristics and impacts of the war on the soldiers and people at home, including the use of propaganda; consequences of the mandate system, reparations, and national self-determination around the globe.</i> | | | | P |
| WHG7.2.2 | Interwar Period – analyze the transformations that shaped world societies between World War I and World War II, including the economic depression, and the spread of fascism, communism, and nationalism in different world regions. <i>Examples may include but are not limited to: case studies of the economic depression on different regions, nations, and the globe; case studies of the rise of fascism and the spread of communism in Europe and Asia; comparing and contrasting the rise of nationalism in China, Turkey, and India.</i> | | | I | P |
| WHG7.2.3 | World War II – analyze the causes, course, characteristics, and consequences of World War II, including the emergence the United States and Soviet Union as global superpowers. <i>Examples may include but are not limited to: investigating the role of aggression and conflict appeasement that led to war in Europe and Asia; the development and enactment of Hitler’s “Final Solution” policy and the Holocaust, major turning points and unique characteristics of the war; spatial and political impact of the Allied negotiations on the nations of Eastern Europe and throughout the world; immediate consequences of the war’s end, including the devastation, effects on population, dawn of the atomic age, and the occupation of Germany and Japan.</i> | | | | P |



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| High School | World History and Geography (WHG) HSCEs | Q1 | Q2 | Q3 | Q4 |
|---------------|--|----|----|----|----|
| WHG7.2.4 | Cold War Conflicts – analyze the causes and consequences of major Cold War conflicts, including the global reconfigurations and restructuring of political and economic relationships in the post-World War II era. <i>Examples may include but are not limited to: investigating economic, political, and military origins of the Cold War; arms race and space race; comparing and contrasting conflicts in Asia, Africa, and Central America; the significance of the Cold War as a 20th century event, including transitions from bipolar to multipolar center(s) of power.</i> | | | I | P |
| WHG7.2.5 | Revolution, Decolonization, and Democratization – evaluate the causes and consequences of revolutionary and independence movements in different world regions. <i>Examples may include but are not limited to: case studies of the Russian Revolution, Mexican Revolution, and/or Iranian Revolution; legacy of imperialism in Africa, Southeast Asia, and Latin America; importance of the massive resistance and non-violent philosophy of Mahatma Gandhi; independence movements and formation of new nations in the Indian Subcontinent, Africa, Eastern Europe, and Southeast Asia; the development of the State of Israel; conflicts such as Arab-Israeli disputes, Palestine, the Suez Crisis, and Sunni-Shi'a conflicts.</i> | | | | |
| WHG7.2.6 | Case Studies of Genocide – analyze the development, enactment, and consequences of, as well as the international community's responses to, the Holocaust (or Shoah), Armenian Genocide, and at least one other genocide. <i>Examples may include but are not limited to: investigating the ideology and policies that led to genocide; policies to address and prevent genocide; cases studies of genocides such as Herero and Namaqua, Cambodia, Rwanda, Ukraine, and/or Bosnia.</i> | | | | |
| WHCG | Contemporary Global Issues | | | | |
| WHCG.1 | Population | | | | |
| WHCG.1 | Explain the causes and consequences of contemporary population changes by analyzing the: <ul style="list-style-type: none"> • population change (including birth rate, death rate, life expectancy, growth rate, doubling time, aging population, changes in science and technology). • distributions of population (including relative changes in urban-rural populations, gender, age, patterns of migration, and population density). • relationship of the population changes to global interactions, and their impact on different regions of the world. | | | I | P |
| WHCG.2 | Resources | | | | |
| WHCG.2 | Explain changes in the use, distribution, and importance of natural resources (including land, water, energy, food; and renewable, non-renewable, and flow resources) on human life, settlement, and interactions by describing and evaluating: <ul style="list-style-type: none"> • changes in spatial distribution and use of natural resources. • the differences in ways societies have been using and distributing natural resources. • social, political, economic, and environmental consequences of the development, distribution, and use of natural resources. • major changes in networks for the production, distribution, and consumption of natural resources, including the growth of multinational corporations and governmental and non-governmental organizations. • the impact of humans on the global environment. | | | I | P |
| WHCG.3 | Patterns of Global Interactions | | | | |



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| High School | World History and Geography (WHG) HSCEs | Q1 | Q2 | Q3 | Q4 |
|---------------|--|-----------|-----------|-----------|-----------|
| WHCG.3 | <p>Define the process of globalization and evaluate the merit of this concept to describe the contemporary world by analyzing:</p> <ul style="list-style-type: none"> • economic interdependence of the world's countries, world trade patterns, and the impact on those who labor, including voluntary and forced migration such as human trafficking. • the exchanges of scientific, technological, and medical innovations. • cultural diffusion and the different ways cultures/societies respond to "new" cultural ideas. • the comparative economic advantages and disadvantages of regions, regarding cost of labor, natural resources, location, and tradition. • distribution of wealth and resources and efforts to narrow the inequitable distribution of resources. | | | | |
| WHCG.4 | Conflict, Cooperation, and Security | | | | |
| WHCG.4 | <p>Analyze the causes and challenges of continuing and new conflicts by describing:</p> <ul style="list-style-type: none"> • tensions resulting from ethnic, territorial, religious, and/or nationalist differences. • causes of and responses to ethnic cleansing/genocide/mass killing. • local and global attempts at peacekeeping, security, democratization, and administration of international justice and human rights. • the types of warfare used in these conflicts, including terrorism, private militias, and new technologies. | | | | |
| | New Standards: | 15 | 11 | 12 | 21 |
| | Review Standards: | 0 | 0 | 0 | 0 |

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QUARTER 1

Unit 1: Foundational Issues (Eras 1-5) (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|---|--|---|
| -review of U.S. history from the formation of the nation through the Civil War | USHG-F1.1 Identify the core ideals of American society as reflected in the documents below and analyze the ways that American society moved toward and/or away from its core ideals Declaration of Independence; the U.S. Constitution (including the Preamble); Bill of Rights; the Gettysburg Address; 13th, 14th, and 15th Amendments. | | Constitution, amendment, Civil War, American Revolution, War of 1812, Mexican-American War, inalienable rights, equality, limited government, George Washington, Thomas Jefferson, Abraham Lincoln, Gettysburg Address, slavery, Union, Confederate |
| | USHG-F1.2 Using the American Revolution, the creation and adoption of the Constitution, and the Civil War as touchstones, develop an argument/narrative about the changing character of American political society and the roles of key individuals across cultures in prompting/supporting the change by discussing the birth of republican government, including the rule of law, inalienable rights, equality, and limited government; the development of governmental roles in American life; and competing views of the responsibilities of governments (federal, state, and local); changes in suffrage qualifications; the development of political parties; America’s political and economic role in the world (National Geography Standard 13, p. 210) | | |
| | USHG-F2.1 Describe the major trends and transformations in American life prior to 1877 including changing political boundaries of the United States (National Geography Standard 13, p. 210); regional economic differences and similarities, including goods produced and the nature of the labor force (National Geography Standard 11, p. 206); changes in the size, location, and composition of the population (National Geography Standard 9, p. 201); patterns of immigration and migration (National Geography Standard 9, p. 201); development of cities (National Geography Standard 12, p. 208); changes in commerce, transportation, and communication (National Geography Standard 11, p. 206); major changes in Foreign Affairs marked by such events as the War of 1812, the Mexican-American War, and foreign relations during the Civil War | | |
| | | Michigan Open Textbook, <i>The American Vision</i> (Glencoe) | |
| Unit 2:Growth of Industrial and Urban America(USHG ERA 6)(days) | | | |
| Unit Focus | Standards | Resources | Unit Vocabulary |
| -factors that led to and impact of the American Industrial Revolution | USH6.1.1 Factors in the American Industrial Revolution – Analyze the factors that enabled the United States to become a major industrial power, including gains from trade (National Geography Standard 11, p. 206); organizational “revolution” (e.g., development of corporations and labor organizations); advantages of physical geography (National Geography Standards 4, 7, and 15; p. 190, 197, and 214); increase in labor through immigration and migration (National Geography Standard 9, p. 201); economic policies of government and industrial leaders (including Andrew Carnegie and John D. Rockefeller); technological advances. | Michigan Open Textbook, <i>The American Vision</i> (Glencoe) | Industrial Revolution, labor organizations, populism, migration, urban, rural, Great Migration, population density |

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|----------|---|--|--|
| USH6.1.2 | Labor’s Response to Industrial Growth – Evaluate the different responses of labor to industrial change including development of organized labor, including the Knights of Labor, American Federation of Labor, and the United Mine Workers; southern and western farmers’ reactions, including the growth of populism and the populist movement (e.g., Farmers Alliance, Grange, Platform of the Populist Party, Bryan’s “Cross of Gold” speech) (National Geography Standard 6, p. 195). | | |
| USH6.1.3 | Urbanization – Analyze the changing urban and rural landscape by examining the location and expansion of major urban centers (National Geography Standard 12, p. 208); the growth of cities linked by industry and trade (National Geography Standard 11, p. 206); the development of cities divided by race, ethnicity, and class (National Geography Standard 10, p. 203); resulting tensions among and within groups (National Geography Standard 13, p. 210); different perspectives about immigrant experiences in the urban setting (National Geography Standards 9, p. 201; 12, p. 208). | | |
| USH6.1.4 | Population Changes – Use census data from 1790-1940 to describe changes in the composition, distribution, and density of the American population and analyze their causes, including immigration, the Great Migration, and urbanization. (National Geography Standard 12, p. 208) | | |
| USH6.1.5 | A Case Study of American industrialism – Using the automobile industry as a case study, analyze the causes and consequences of this major industrial transformation by explaining the impact of resource availability (National Geography Standard 16, p. 216); entrepreneurial decision making by Henry Ford and others; domestic and international migrations (National Geography Standard 9, p. 201); the development of an industrial work force; the impact on Michigan; the impact on American society. | | |

QUARTER 2

Unit 3: Becoming A World Power (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|-----------------|---|--|
| -Causes on WWI -U.S. role pre- and post-WWI - domestic impact of WWI | USH6.2.1 | Growth of U.S. Global Power – Locate on a map the territories (Cuba, Puerto Rico, Philippines, Hawaii, Panama Canal Zone) acquired by the United States during its emergence as an imperial power between 1890 and 1914, and analyze the role the Spanish American War, the Philippine Revolution, the Panama Canal, the Open Door Policy, and the Roosevelt Corollary played in expanding America’s global influence and redefining its foreign policy. (National Geography Standards 1 and 3; p. 184 and 188) | imperial, WWI, neutrality, Woodrow Wilson, League of Nations, Treaty of Versailles |
| | USH6.2.2 | WWI – Explain the causes of World War I, the reasons for American neutrality and eventual entry into the war; and America’s role in shaping the course of the war. | |
| | USH6.2.3 | Domestic Impact of WWI - Analyze the domestic impact of WWI on the growth of the government (e. g., War Industries Board), the expansion of the economy, the restrictions on civil liberties (e.g., Sedition Act, Red Scare, Palmer Raids), and the expansion of women’s suffrage. | |

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|--|-----------------|---|--|--|
| | | Wilson and His Opponents – Explain how Wilson’s “Fourteen Points” differed from proposals by others, including French and British leaders and domestic opponents, in the debate over the Versailles Treaty, United States participation in the League of Nations, the redrawing of European political boundaries, and the resulting geopolitical tensions that continued to affect Europe. (National Geography Standards 3 and 13; p. 188 and 210) | | |
| | USH6.2.4 | | | |

Unit 4: Progressivism and Reform(days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|-----------------|---|---|
| -analyze causes and consequences of the progressive movement | USH6.3.1 | Social Issues – Describe at least three significant problems or issues created by America’s industrial and urban transformation between 1895 and 1930 (e.g., urban and rural poverty and blight, child labor, immigration, political corruption, public health, poor working conditions, and monopolies). | <i>Michigan Open Textbook, The American Vision (Glencoe)</i> progressivism, monopoly, temperance, Upton Sinclair, Eugene Debs, immigration, suffrage, Susan B. Anthony, Elizabeth Cady Stanton, amendment, corruption, child labor |
| | USH6.3.2 | Causes and Consequences of Progressive Reform – Analyze the causes, consequences, and limitations of Progressive reform in the following areas: major changes in the Constitution, including 16th, 17th, 18th, and 19th Amendments; new regulatory legislation (e.g., Pure Food and Drug Act, Sherman and Clayton Anti-Trust Acts); the Supreme Court’s role in supporting or slowing reform; role of reform organizations, movements and individuals in promoting change (e.g., Women’s Christian Temperance Union, settlement house movement, conservation movement, and the National Association for the Advancement of Colored People, Jane Addams, Carrie Chapman Catt, Eugene Debs, W.E.B. DuBois, Upton Sinclair, Ida Tarbell) (National Geography Standard 14, p. 212); efforts to expand and restrict the practices of democracy as reflected in post-Civil War struggles of African Americans and immigrants (National Geography Standard 9 and 10; p. 201 and 203). | |
| | USH6.3.3 | Women’s Suffrage – Analyze the successes and failures of efforts to expand women’s rights, including the work of important leaders (e.g., Susan B. Anthony, Elizabeth Cady Stanton) and the eventual ratification of the 19th Amendment. | |

QUARTER 3

Unit 5: Growing Crisis of Industrial Capitalism and Responses (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|-----------|---|--|
| -evaluate causes and consequences of the Great Depression -impact of the New Deal on American life | USH7.1.1 | The Twenties – Identify and explain the significance of the cultural changes and tensions in the “Roaring Twenties” including: cultural movements, such as the Harlem Renaissance and the “lost generation” and the struggle between “traditional” and “modern” America (e.g., Scopes, Trial, immigration restrictions, Prohibition, role of women, mass consumption) (National Geography Standard 10, p. 203). | <i>Michigan Open Textbook, The American Vision (Glencoe)</i> Great Depression, Hooverilles, Herbert Hoover, Franklin Roosevelt, New Deal, prohibition |

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|--|-----------------|---|--|--|
| | USH7.1.2 | Causes and Consequences of the Great Depression – Explain and evaluate the multiple causes and consequences of the Great Depression by analyzing: the political, economic, environmental, and social causes of the Great Depression including fiscal policy, overproduction, under consumption, and speculation, the 1929 crash, and the Dust Bowl (National Geography Standards 14 and 15; p. 212 and 214); the economic and social toll of the Great Depression, including unemployment and environmental conditions that affected farmers, industrial workers and families (National Geography Standard 15, p. 214); Hoover’s policies and their impact (e.g., Reconstruction Finance Corporation). | | |
| | USH7.1.3 | The New Deal – Explain and evaluate Roosevelt’s New Deal Policies including: expanding federal government’s responsibilities to protect the environment (e.g., Dust Bowl and the Tennessee Valley), meet challenges of unemployment, address the needs of workers, farmers, poor, and elderly (National Geography Standard 14, p. 212); opposition to the New Deal and the impact of the Supreme Court in striking down and then accepting New Deal laws; consequences of New Deal policies (e.g., promoting workers’ rights, development of Social Security program, and banking and financial regulation conservation practices, crop subsidies) (National Geography Standard 16, p. 216) | | |

Unit 6: WWII (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|-----------------|---|--|
| -causes that led to U.S. involvement in WWII -U.S. role in WWII -domestic changes occurring during WWII -analyze responses to genocide post-WWII | USH7.2.1 | Causes of WWII – Analyze the factors contributing to World War II in Europe and in the Pacific region, and America’s entry into war including: the political and economic disputes over territory (e.g., failure of Versailles Treaty, League of Nations, Munich Agreement) (National Geography Standard 13, p. 210); the differences in the civic and political values of the United States and those of Nazi Germany and Imperial Japan; United States neutrality; The bombing of Pearl Harbor (National Geography Standard 13, p. 210). | Nazi, neutrality, genocide, Adolf Hitler, internment, kamikaze <i>Michigan Open Textbook, The American Vision (Glencoe)</i> |
| | USH7.2.2 | U.S. and the Course of WWII – Evaluate the role of the U.S. in fighting the war militarily, diplomatically and technologically across the world (e.g., Germany First strategy, Big Three alliance and the development of atomic weapons). | |
| | USH7.2.3 | Impact of WWII on American Life – analyze the changes in American life brought about by U.S. participation in World War II including: Mobilization of economic, military, and social resources; Role of women and minorities in the war effort; Role of the home front in supporting the war effort (e.g., rationing, work hours, taxes); Internment of Japanese-Americans (National Geography Standard 10, p. 203). | |
| | USH7.2.4 | Responses to Genocide – Investigate development and enactment of Hitler’s “final solution” policy, and the responses to genocide by the Allies, the U.S. government, international organizations, and individuals (e.g., liberation of concentration camps, Nuremberg war crimes tribunals, establishment of state of Israel). (National Geography Standard 13, p. 210) | |

Unit 7: Cold War and the U.S. (days)

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| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|---|--|--|
| -factors that led to the Cold War - impact of the Cold War on domestic and foreign policy -events and decisions that led to the end of the Cold War | USH8.1.1 Origins and Beginnings of Cold War – Analyze the factors that contributed to the Cold War including: differences in the civic, ideological and political values, and the economic and governmental institutions of the U.S. and U.S.S.R.; diplomatic decisions made at the Yalta and Potsdam Conferences (1945); actions by both countries in the last years of and years following World War II (e.g., the use of the atomic bomb, the Marshall Plan, the Truman Doctrine, North American Treaty Alliance (NATO), and Warsaw Pact) (National Geography Standard 13, p 210). | <i>Michigan Open Textbook, The American Vision (Glencoe)</i> | Cold War, U.S.S.R., NATO, Warsaw Pact, communism, Red Scare, nuclear weapons, proxy, |
| | USH8.1.2 Foreign Policy during the Cold War – Evaluate the origins, setbacks, and successes of the American policy of “containing” the Soviet Union, including: the development of a U.S. national security establishment, composed of the Department of Defense, the Department of State, and the intelligence community (National Geography Standard 13, p.210); the armed struggle with Communism, including the Korean conflict (National Geography Standard 13, p. 210); direct conflicts within specific world regions including Germany and Cuba (National Geography Standard 5 and 13; p. 194 and 210); U.S. involvement in Vietnam, and the foreign and domestic consequences of the war (e.g., relationship/conflicts with U.S.S.R. and China, U.S. military policy and practices, responses of citizens and mass media) (National Geography Standard 13, p. 210); Indirect (or proxy) confrontations within specific world regions (e.g., Chile, Angola, Iran, Guatemala) (National Geography Standard 5 and 13; p. 194 and 210); The arms race (National Geography Standard 13, p. 210). | | |
| | USH8.1.3 End of the Cold War – Evaluate the factors that led to the end of the cold war including détente, policies of the U.S. and U.S.S.R. and their leaders (President Reagan and Premier Gorbachev), the political breakup of the Soviet Union, and the Warsaw Pact. | | |

QUARTER 4

Unit 8: Domestic Changes and Policies (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|---|--|---|
| -Analyze the impact of domestic policy and population changes post-WWII -Analyze the impact of controversial decisions made in various branches of the government post-WWII | USH8.2.1 Demographic Changes – Use population data to produce and analyze maps that show the major changes in population distribution, spatial patterns and density, including the Baby Boom, new immigration, suburbanization, reverse migration of African Americans to the South, and the flow of population to the “Sunbelt.” (National Geography Standards 1,3, 5, 9, 10; p. 184, 188, 192, 201, 203) | <i>Michigan Open Textbook, The American Vision (Glencoe)</i> | Baby Boom, McCarthyism, Roe v. Wade, Vietnam War, Watergate |
| | USH8.2.2 Policy Concerning Domestic Issues – Analyze major domestic issues in the Post-World War II era and the policies designed to meet the challenges by: describing issues challenging Americans such as domestic anticommunism (McCarthyism), labor, poverty, health care, infrastructure, immigration, and the environment (National Geography Standards 9 and 14; p. 201 and 212); evaluating policy decisions and legislative actions to meet these challenges (e.g., G.I. Bill of Rights -1944, Taft-Hartley Act – 1947, Twenty-Second Amendment to the U.S. Constitution – 1951, Federal Highways Act – 1956, National Defense Act – 1957, E.P.A. – 1970 (National Geography Standards 12 and 14; p. 108 and 212). | | |

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| | USH8.2.3 | Comparing Domestic Policies – Focusing on causes, programs, and impacts, compare and contrast Roosevelt’s New Deal initiatives, Johnson’ Great Society programs, and Reagan’s market-based domestic policies. (National Geography Standard 14, p. 212) | | |
| | USH8.2.4 | Domestic Conflicts and Tensions – Using core democratic values, analyze and evaluate the competing perspectives and controversies among Americans generated by U.S. Supreme Court decisions (e.g., Roe v. Wade, Gideon, Miranda, Tinker, Hazelwood) the Vietnam War (anti-war and counter-cultural movements), environmental movement, women’s rights movement, and the constitutional crisis generated by the Watergate scandal. (National Geography Standard 16, p 216) | | |

Unit 9: Civil Rights in Post-WWII Era (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|---|---|--|
| -understand the reasons for the Civil Rights movement and its effect on various parts of American life - understand the effects of major events from the Civil Rights movement -What influences did the Civil Rights movement have on other movements and vice versa | <p>USH8.3.1 Civil Rights Movement – Analyze the key events, ideals, documents, and organizations in the struggle for civil rights by African Americans including: the impact of WWII and the Cold War (e.g., racial and gender integration of the military); Supreme Court decisions and governmental actions (e.g., Brown v. Board – 1954, Civil Rights Act – 1957, Little Rock schools desegregation, Civil Rights Act – 1964, Voting Rights Act – 1965; protest movements, organizations, and civil actions (e.g., integration of baseball, Montgomery Bus Boycott – 1955-1956, March on Washington – 1963, freedom rides, National Association for the Advancement of Colored People (NAACP), Southern Christian Leadership Conference (SCLC), Student Non-violent Coordinating Committee (SNCC), Nation of Islam, Black Panthers); resistance to Civil Right (National Geography Standards 6 and 10, p. 195 and 203).</p> <p>USH8.3.2 Ideals of the Civil Rights Movement – Compare and contrast the ideas in Martin Luther King’s March on Washington speech to the ideas expressed in the Declaration of Independence, the Seneca Falls Resolution, and the Gettysburg Address.</p> <p>USH8.3.3 Women’s Rights – Analyze the causes and course of the women’s rights movement in the 1960s and 1970s (including role of population shifts, birth control, increasing number of women in the work force, National Organization for Women (NOW), and the Equal Rights Amendment (ERA)). (National Geography Standard 10, p. 203)</p> <p>USH8.3.4 Civil Rights Expanded – Evaluate the major accomplishments and setbacks in civil rights and liberties for American minorities over the 20th century including American Indians, Latinos/as, new immigrants, people with disabilities, and gays and lesbians. (National Geography Standard 10, p. 203)</p> <p>USH8.3.5 Tensions and Reactions to Poverty and Civil Rights – Analyze the causes and consequences of the civil unrest that occurred in American cities by comparing the civil unrest in Detroit with at least one other American city (e.g., Los Angeles, Cleveland, Chicago, Atlanta, Newark). (National Geography Standard 12, p. 208)</p> | <p><i>Michigan Open Textbook, The American Vision (Glencoe)</i></p> | Civil Rights Movement, minority, NAACP, Montgomery Bus Boycott, Brown v. Board, Black Panthers, Equal Rights Amendment, Martin Luther King Jr. |

Unit 10: America in the New Global Age (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------|-----------|-----------|-----------------|
|------------|-----------|-----------|-----------------|

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|---|----------|---|--|---|
| -role of the U.S. in the world after the Cold War -how 9/11 altered American domestic and foreign policy | USH9.1.1 | Economic Changes – Using the changing nature of the American automobile industry as a case study, evaluate the changes in the American economy created by new markets, natural resources, technologies, corporate structures, international competition, new sources and methods of production, energy issues, and mass communication. (National Geography Standard 11, p. 206) | <i>Michigan Open Textbook, The American Vision (Glencoe)</i> | Cold War, 9/11, partisan, Ronald Reagan, terrorism, antecedent, precedent, core democratic values |
| -justify a position on an is | USH9.1.2 | Transformation of American Politics – Analyze the transformation of American politics in the late 20th and early 21st centuries including: growth of the conservative movement in national politics, including the role of Ronald Reagan; role of evangelical religion in national politics (National Geography Standards 3 and 6; p. 188 and 195); intensification of partisanship; partisan conflict over the role of government in American life; role of regional differences in national politics (National Geography Standard 6, p. 195). | | |
| | USH9.2.1 | U.S. in the Post-Cold War World – Explain the role of the United States as a super-power in the post-Cold War world, including advantages, disadvantages, and new challenges (e.g., military missions in Lebanon, Somalia, Haiti, Bosnia, Kosovo, and the Gulf War). (National Geography Standard 13, p. 210) | | |
| | USH9.2.2 | 9/11 and Responses to Terrorism – Analyze how the attacks on 9/11 and the response to terrorism have altered American domestic and international policies (including e.g., the Office of Homeland Security, Patriot Act, wars in Afghanistan and Iraq, role of the United States in the United Nations, (NATO). (National Geography Standard 13, p. 210) | | |
| | USH9.3.1 | Compose a persuasive essay on a public policy issue, and justify the position with a reasoned argument based upon historical antecedents and precedents, and core democratic values or constitutional principles including: role of the United States in the world, national economic policy, welfare policy, energy policy, health care, education and civil rights (National Geography Standard 17, p. 216) | | |

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QUARTER 1

Unit 1: Conceptual Foundations of Civic and Political Life (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|---|---|--|
| -Role of citizens -purpose of government -comparing different types of government structures | C 1.1.1 | Identify roles citizens play in civic and private life, with emphasis on leadership. | citizen, sovereignty, anarchy, monarchy, democracy, communist, socialist, parliament |
| | C 1.1.2 | Explain and provide examples of the concepts “power,” “legitimacy,” “authority,” and “sovereignty.” | |
| | C 1.1.3 | Identify and explain competing arguments about the necessity and purposes of government (such as to protect inalienable rights, promote the general welfare, resolve conflicts, promote equality, and establish justice for all). (See USHG F1.1; F1.2; 8.3.2) | |
| | C 1.1.4 | Explain the purposes of politics, why people engage in the political process, and what the political process can achieve (e.g., promote the greater good, promote self-interest, advance solutions to public issues and problems, achieve a just society). (See USHG F1.1; F1.2; 6.3.2; 8.3.1) | |
| | C 1.2.1 | Identify, distinguish among, and provide examples of different forms of governmental structures including anarchy, monarchy, military junta, aristocracy, democracy, authoritarian, constitutional republic, fascist, communist, socialist, and theocratic states. | |
| | C 1.2.2 | Explain the purposes and uses of constitutions in defining and limiting government, distinguishing between historical and contemporary examples of constitutional governments that failed to limit power (e.g., Nazi Germany and Stalinist Soviet Union) and successful constitutional governments (e.g., contemporary Germany and United Kingdom). (See USHG 7.2.1; WHG 7.3) | |
| | C 1.2.3 | Compare and contrast parliamentary, federal, confederal, and unitary systems of government by analyzing similarities and differences in sovereignty, diffusion of power, and institutional structure. (See USHG F1.1; F1.2) | |
| C 1.2.4 | Compare and contrast direct and representative democracy. (See USHG F1.1; F1.2) | | |

Unit 2: Origins and Foundations of Government in the U.S. (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|----------------|--|--|
| -origins of the American constitutional government - changes in American government | C 2.1.1 | Explain the historical and philosophical origins of American constitutional government and evaluate the influence of ideas found in the Magna Carta, English Bill of Rights, Mayflower Compact, Iroquois Confederation, Northwest Ordinance, Virginia Statute for Religious Freedom, Declaration of Independence, Articles of Confederation, and selected Federalist Papers (the 10th, 14th, 51st), John Locke’s Second Treatise, Montesquieu’s Spirit of Laws, Paine’s Common Sense. | ratification, Constitution, equality, justice, liberty, popular sovereignty, common good |
| | C 2.1.2 | Explain the significance of the major debates and compromises underlying the formation and ratification of American constitutional government including the Virginia and New Jersey plans, the Great Compromise, debates between Federalists and Anti-Federalists, debates over slavery, and the promise for a bill of rights after ratification. | |

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| C 2.1.3 | Explain how the Declaration of Independence, Constitution and Bill of Rights reflected political principles of popular sovereignty, rule of law, checks and balances, separation of powers, social compact, natural rights, individual rights, separation of church and state, republicanism and federalism. | | |
| C 2.1.4 | Explain challenges and modifications to American constitutional government as a result of significant historical events such as the American Revolution, the Civil War, expansion of suffrage, the Great Depression, and the civil rights movement. | | |
| C 2.2.1 | Identify and explain the fundamental values of America's constitutional republic (e.g., life, liberty, property, the pursuit of happiness, the common good, justice, equality, diversity, authority, participation, and patriotism) and their reflection in the principles of the United States Constitution (e.g., popular sovereignty, republicanism, rule of law, checks and balances, separation of powers, and federalism). | | |
| C 2.2.2 | Explain and evaluate how Americans, either through individual or collective actions, use constitutional principles and fundamental values to narrow gaps between American ideals and reality with respect to minorities, women, and the disadvantaged. (See USHG 6.1.2; 6.3.2; 7.1.3; 8.3) | | |
| C 2.2.3 | Use past and present policies to analyze conflicts that arise in society due to competing constitutional principles or fundamental values (e.g., liberty and authority, justice and equality, individual rights, and the common good). (See USHG 6.3.2; 8.2.4; 8.3.1; 9.2.2) | | |
| C 2.2.4 | Analyze and explain ideas about fundamental values like liberty, justice, and equality found in a range of documents (e.g., Martin Luther King's "I Have a Dream" speech and "Letter from Birmingham City Jail," the Universal Declaration of Human Rights, the Declaration of Sentiments, the Equal Rights Amendment, and the Patriot Act). (See USHG F1.1; 8.3.2; 9.2.2) | | |
| C 2.2.5 | Use examples to investigate why people may agree on constitutional principles and fundamental values in the abstract, yet disagree over their meaning when they are applied to specific situations. (See USHG 8.2.4) | | |

Unit 3: Structure and Function of Government in the United States of America (National) (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|-----------|--|--|
| -purpose, organization, and function of the branches of government -checks and balances of the three branches of government | C 3.1.1 | Analyze the purposes, organization, functions, and processes of the legislative branch as enumerated in Article I of the Constitution. | legislative branch, executive branch, judicial branch, separation of powers, amendment, individual rights, |
| | C 3.1.2 | Analyze the purposes, organization, functions, and processes of the executive branch as enumerated in Article II of the Constitution. | |
| | C 3.1.3 | Analyze the purposes, organization, functions, and processes of the judicial branch as enumerated in Article III of the Constitution. | |
| | C 3.1.4 | Identify the role of independent regulatory agencies in the federal bureaucracy (e.g., Federal Reserve Board, Food and Drug Administration, Federal Communications Commission). (See USHG 6.3.2) | |

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| C 3.1.5 | Use case studies or examples to examine tensions between the three branches of government (e.g., powers of the purse and impeachment, advise and consent, veto power, and judicial review). | | |
| C 3.1.6 | Evaluate major sources of revenue for the national government, including the constitutional provisions for taxing its citizens | | |
| C 3.1.7 | Explain why the federal government is one of enumerated powers while state governments are those of reserved powers | | |
| C 3.2.1 | Explain how the principles of enumerated powers, federalism, separation of powers, bicameralism, checks and balances, republicanism, rule of law, individual rights, inalienable rights, separation of church and state, and popular sovereignty serve to limit the power of government. | | |
| C 3.2.2 | Use court cases to explain how the Constitution is maintained as the supreme law of the land (e.g., Marbury v. Madison, Gibbons v. Ogden, McCulloch v. Maryland). | | |
| C 3.2.3 | Identify specific provisions in the Constitution that limit the power of the federal government. | | |
| C 3.2.4 | Explain the role of the Bill of Rights and each of its amendments in restraining the power of government over individuals. (See USHG F1.1) | | |
| C 3.2.5 | Analyze the role of subsequent amendments to the Constitution in extending or limiting the power of government, including the Civil War/Reconstruction Amendments and those expanding suffrage. (See USHG F1.1) | | |
| C 3.4.1 | Explain why the rule of law has a central place in American society (e.g., Supreme Court cases like Marbury v. Madison and U.S. v. Nixon; practices such as submitting bills to legal counsel to ensure congressional compliance with the law). (See USHG F1.1, 8.2.4) | | |
| C 3.4.2 | Describe what can happen in the absence or breakdown of the rule of law (e.g., Ku Klux Klan attacks, police corruption, organized crime, interfering with the right to vote, and perjury). (See USHG 8.3.5) | | |
| C 3.4.3 | Explain the meaning and importance of equal protection of the law (e.g., the 14th Amendment, Americans with Disabilities Act, equal opportunity legislation). | | |
| C 3.4.4 | Describe considerations and criteria that have been used to deny, limit, or extend protection of individual rights (e.g., clear and present danger, time, place and manner restrictions on speech, compelling government interest, security, libel or slander, public safety, and equal opportunity). | | |
| C 3.4.5 | Analyze the various levels and responsibilities of courts in the federal and state judicial system and explain the relationships among them. | | |

Unit 4: State Government and Other Political Actors (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|-----------|-----------|----------------------------|
| -Function of state and local government - role of political parties/politics -the public's influence on governmental actions | C 3.3.1 | | state government, local go |
| | C 3.3.2 | | |

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| C 3.3.3 | Explain the tension among federal, state, and local governmental power using the necessary and proper clause, the commerce clause, and the Tenth Amendment | | |
| C 3.3.4 | Describe how state and local governments are organized, their major responsibilities, and how they affect the lives of citizens. | | |
| C 3.3.5 | Describe the mechanisms by which citizens monitor and influence state and local governments (e.g., referendum, initiative, recall). | | |
| C 3.3.6 | Evaluate the major sources of revenue for state and local governments. | | |
| C 3.3.7 | Explain the role of state constitutions in state governments. | | |
| C 3.5.1 | Explain how political parties, interest groups, the media, and individuals can influence and determine the public agenda. | | |
| C 3.5.2 | Describe the origin and the evolution of political parties and their influence. (See Grade 5 SS; USHG 9.1.2) | | |
| C 3.5.3 | Identify and explain the roles of various associations and groups in American politics (e.g., political organizations, political action committees, interest groups, voluntary and civic associations, professional organizations, unions, and religious groups). | | |
| C 3.5.4 | Explain the concept of public opinion, factors that shape it, and contrasting views on the role it should play in public policy. | | |
| C 3.5.5 | Evaluate the actual influence of public opinion on public policy. | | |
| C 3.5.6 | Explain the significance of campaigns and elections in American politics, current criticisms of campaigns, and proposals for their reform. | | |
| C 3.5.7 | Explain the role of television, radio, the press, and the internet in political communication. | | |
| C 3.5.8 | Evaluate, take, and defend positions about the formation and implementation of a current public policy issue, and examine ways to participate in the decision making process about the issue. | | |
| C 3.5.9 | In making a decision on a public issue, analyze various forms of political communication (e.g., political cartoons, campaign advertisements, political speeches, and blogs) using criteria like logical validity, factual accuracy and/or omission, emotional appeal, distorted evidence, and appeals to bias or prejudice. | | |
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QUARTER 2

Unit 5: U.S. Role in World Affairs (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
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| -U.S. impact on global affairs -impact of past foreign policy decisions on world affairs - different methods through which world affairs are impacted | C 4.1.1 | Identify and evaluate major foreign policy positions that have characterized the United States' relations with the world (e.g., isolated nation, imperial power, world leader) in light of foundational values and principles, provide examples of how they were implemented and their consequences (e.g., Spanish American War, Cold War containment) (See USHG 6.2; 7.2; 8.1.2; 9.2.1). | foreign policy, diplomacy, treaties, immigration, humanitarian aid, European Union, United Nations, NATO, NAFTA |
| | C 4.1.2 | Describe the process by which United States foreign policy is made, including the powers the Constitution gives to the president; Congress and the judiciary; and the roles federal agencies, domestic interest groups, the public, and the media play in foreign policy. | |
| | C 4.1.3 | Evaluate the means used to implement U.S. foreign policy with respect to current or past international issues (e.g., diplomacy, economic, military and humanitarian aid, treaties, sanctions, military intervention, and covert action). | |
| | C 4.1.4 | Using at least two historical examples, explain reasons for, and consequences of, conflicts that arise when international disputes cannot be resolved peacefully. (See USHG 6.2.2; 7.2; 8.1.2; 9.2.2; WHG 7.2.1; 7.2.3; 8.1.2) | |
| | C 4.2.1 | Describe how different political systems interact in world affairs with respect to international issues. (See USHG 6.2.4) | |
| | C 4.2.2 | Analyze the impact of American political, economic, technological, and cultural developments on other parts of the world (e.g., immigration policies, economic, military and humanitarian aid, computer technology research, popular fashion, and film). (See USHG 6.1.4; 8.2.1) | |
| | C 4.2.3 | Analyze the impact of political, economic, technological, and cultural developments around the world on the United States (e.g., terrorism, emergence of regional organizations like the European Union, multinational corporations, and interdependent world economy). (See USHG 6.1.1; 9.1.1; 9.2.1) | |
| | C 4.2.4 | Identify the purposes and functions of governmental and non-governmental international organizations, and the role of the United States in each (e.g., the United Nations, NATO, World Court, Organization of American States, International Red Cross, Amnesty International). | |
| | C 4.2.5 | Evaluate the role of the United States in important bilateral and multilateral agreements (e.g., NAFTA, Helsinki Accords, Antarctic Treaty, Most Favored Nation Agreements, and the Kyoto Protocol). | |
| | C 4.2.6 | Evaluate the impact of American political ideas and values on other parts of the world (e.g., American Revolution, fundamental values and principles expressed in the Declaration of Independence and the Constitution). | |

Unit 6: Citizenship in the U.S. (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
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-role of the citizen in the U.S.
- evolution of the rights and responsibilities of citizens

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| C 5.1.1 | Using examples, explain the idea and meaning of citizenship in the United States of America, and the rights and responsibilities of American citizens (e.g., people participate in public life, know about the laws that govern society, respect and obey those laws, participate in political life, stay informed and attentive about public issues, and voting). |
| C 5.1.2 | Compare the rights of citizenship Americans have as a member of a state and the nation. |
| C 5.2.1 | Explain the distinction between citizens by birth, naturalized citizens, and non-citizens. |
| C 5.2.2 | Describe the distinction between legal and illegal immigration and the process by which legal immigrants can become citizens. |
| C 5.2.3 | Evaluate the criteria used for admission to citizenship in the United States and how Americans expanded citizenship over the centuries (e.g., removing limitations of suffrage). |
| C 5.3.1 | Identify and explain personal rights (e.g., freedom of thought, conscience, expression, association, movement and residence, the right to privacy, personal autonomy, due process of law, free exercise of religion, and equal protection of the law). |
| C 5.3.2 | Identify and explain political rights (e.g., freedom of speech, press, assembly, and petition; and the right to vote and run for public office). |
| C 5.3.3 | Identify and explain economic rights (e.g., the right to acquire, use, transfer, and dispose of property, choose one's work and change employment, join labor unions and professional associations, establish and operate a business, copyright protection, enter into lawful contracts, and just compensation for the taking of private property for public use). |
| C 5.3.4 | Describe the relationship between personal, political, and economic rights and how they can sometimes conflict. |
| C 5.3.5 | Explain considerations and criteria commonly used in determining what limits should be placed on specific rights. |
| C 5.3.6 | Describe the rights protected by the First Amendment, and using case studies and examples, explore the limit and scope of First Amendment rights. |
| C 5.3.7 | Using the Fourth, Fifth, Sixth, Seventh and Eighth Amendments, describe the rights of the accused; and using case studies and examples, explore the limit and scope of these rights. |
| C 5.3.8 | Explain and give examples of the role of the Fourteenth Amendment in extending the protection of individual rights against state action. |
| C 5.3.9 | Use examples to explain why rights are not unlimited and absolute. |
| C 5.4.1 | Distinguish between personal and civic responsibilities and describe how they can sometimes conflict with each other. |
| C 5.4.2 | Explain why particular dispositions in citizens are considered important to the preservation of American constitutional government by investigating the question: What dispositions or character traits are considered important to the preservation of American constitutional government? |
| C 5.4.3 | Explain why meeting personal and civic responsibilities is important to the preservation and improvement of American constitutional democracy. |

citizenship, naturalized citizen, immigrant, civic duty

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| | C 5.5.1 | Describe dispositions people think lead citizens to become independent members of society (e.g., self-discipline, self-governance, and a sense of individual responsibility) and thought to foster respect for individual worth and human dignity (e.g., respect for individual rights and choice, and concern for the well-being of others) | | |
| | C 5.5.2 | Describe the dispositions thought to encourage citizen involvement in public affairs (e.g., “civic virtue” or attentiveness to and concern for public affairs; patriotism or loyalty to values and principles underlying American constitutional democracy) and to facilitate thoughtful and effective participation in public affairs (e.g., civility, respect for the rights of other individuals, respect for law, honesty, open-mindedness, negotiation and compromise; persistence, civic mindedness, compassion, patriotism, courage, and tolerance for ambiguity). | | |
| | C 5.5.3 | Explain why the development of citizens as independent members of society who are respectful of individual worth and human dignity, inclined to participate in public affairs, and are thoughtful and effective in their participation, is important to the preservation and improvement of American constitutional democracy | | |
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Unit 7: Citizenship in Action(days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|-----------|--|--|
| -ways in which citizens can fulfill their civic duty -study of specific events involving citizen actions | C 6.1.1 | Identify and research various viewpoints on significant public policy issues. | civil disobedience, service learning, primary source, secondary source |
| | C 6.1.2 | Locate, analyze, and use various forms of evidence, information, and sources about a significant public policy issue, including primary and secondary sources, legal documents (e.g., Constitutions, court decisions, state law), non-text based information (e.g., maps, charts, tables, graphs, and cartoons), and other forms of political communication (e.g., oral political cartoons, campaign advertisements, political speeches, and blogs). | |
| | C 6.1.3 | Develop and use criteria (e.g., logical validity, factual accuracy and/or omission, emotional appeal, credibility, unstated assumptions, logical fallacies, inconsistencies, distortions, and appeals to bias or prejudice, overall strength of argument) in analyzing evidence and position statements. | |
| | C 6.1.4 | Address a public issue by suggesting alternative solutions or courses of action, evaluating the consequences of each, and proposing an action to address the issue or resolve the problem. | |
| | C 6.1.5 | Make a persuasive, reasoned argument on a public issue and support using evidence (e.g., historical and contemporary examples), constitutional principles, and fundamental values of American constitutional democracy; explain the stance or position. | |
| | C 6.2.1 | Describe the relationship between politics and the attainment of individual and public goals (e.g., how individual interests are fulfilled by working to achieve collective goals). | |
| | C 6.2.2 | Distinguish between and evaluate the importance of political participation and social participation. | |

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| C 6.2.3 | Describe how, when, and where individuals can participate in the political process at the local, state, and national levels (including, but not limited to voting, attending political and governmental meetings, contacting public officials, working in campaigns, community organizing, demonstrating or picketing, boycotting, joining interest groups or political action committees); evaluate the effectiveness of these methods of participation. | American Civics (Holt), Michigan Open Textbook |
| C 6.2.4 | Participate in a real or simulated election, and evaluate the results, including the impact of voter turnout and demographics. | |
| C 6.2.5 | Describe how citizen movements seek to realize fundamental values and principles of American constitutional democracy. | |
| C 6.2.6 | Analyze different ways people have used civil disobedience, the different forms civil disobedience might take (e.g., violent and non-violent) and their impact. | |
| C 6.2.7 | Participate in a service-learning project, reflect upon experiences, and evaluate the value of the experience to the American ideal of participation. | |
| C 6.2.8 | Describe various forms and functions of political leadership and evaluate the characteristics of an effective leader. | |
| C 6.2.9 | Evaluate the claim that constitutional democracy requires the participation of an attentive, knowledgeable, and competent citizenry | |
| C 6.2.10 | Participate in a real or simulated public hearing or debate and evaluate the role of deliberative public discussions in civic life. | |
| C 6.2.11 | Identify typical issues, needs, or concerns of citizens (e.g., seeking variance, zoning changes, information about property taxes), and actively demonstrate ways citizens might use local governments to resolve issues or concerns. | |
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Unit 1: Individual, Business, and Government Choices (days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|--|-----------|---|--|--|
| -roles of individuals, business and government in the economy - the affect of entrepreneurship on the economy | E 1.1 | Explain the meaning of civic life, politics, and government through the investigation of such questions as: What is civic life? What are politics? What is government? What are the purposes of politics and government? | Junior Achievement Student Study Guide and Companion Text, <i>Economics</i> (Glencoe), Odysseyware | scarcity, choice, opportunity cost, decision, wants, needs, entrepreneurship, comparative advantage, |
| | E 1.1.1 | Scarcity, Choice, Opportunity Costs, and Comparative Advantage – Using examples, explain how scarcity, choice, opportunity costs affect decisions that households, businesses, and governments make in the market place and explain how comparative advantage creates gains from trade. | | |
| | E 1.1.2 | Entrepreneurship – Identify the risks, returns and other characteristics of entrepreneurship that bear on its attractiveness as a career. | | |

Unit 2: Competitive Markets (days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|---|-----------|--|--|---|
| -the effects of supply and demand on each other -how businesses operate in competitive markets - how choices are influenced by incentives and markets | E 1.2 | Analyze how the functions and constraints of business structures, the role of price in the market, and relationships of investment to productivity and growth, impact competitive markets. | Junior Achievement Student Study Guide and Companion Text, <i>Economics</i> (Glencoe), Odysseyware | supply, demand, incentives, elasticity, investments, market, competitive market, consumer, investment |
| | E 1.2.1 | Business Structures – Compare and contrast the functions and constraints facing economic institutions including small and large businesses, labor unions, banks, and households | | |
| | E 1.2.2 | Price in the Market – Analyze how prices send signals and provide incentives to buyers and sellers in a competitive market. | | |
| | E 1.2.3 | Investment, Productivity and Growth – Analyze the role investments in physical (e.g., technology) and human capital (e.g., education) play in increasing productivity and how these influence the market. | | |
| | E 1.3 | Compare how supply, demand, price, equilibrium, elasticity, and incentives affect the workings of a market. | | |
| | E 1.3.1 | Law of Supply – Explain the law of supply and analyze the likely change in supply when there are changes in prices of the productive resources (e.g., labor, land, capital including technology), or the profit opportunities available to producers by selling other goods or services, or the number of sellers in a market. | | |
| | E 1.3.2 | Law of Demand – Explain the law of demand and analyze the likely change in demand when there are changes in prices of the goods or services, availability of alternative (substitute or complementary) goods or services, or changes in the number of buyers in a market created by such things as change in income or availability of credit. | | |
| | E 1.3.3 | Price, Equilibrium, Elasticity, and Incentives – Analyze how prices change through the interaction of buyers and sellers in a market including the role of supply, demand, equilibrium, elasticity, and explain how incentives (monetary and non-monetary) affect choices of households and economic organizations. | | |

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| Unit 3: Role of Government in the Market (days) | | | |
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| Unit Focus | Standards | Resources | Unit Vocabulary |
| - the function of government in a market economy (i.e. consumer protection, policy, incentivising behavior) - how does the government raise revenue | E 1.4 | Describe the varied ways government can impact the market through policy decisions, protection of consumers, and as a producer and consumer of goods and services, and explain how economic incentives affect government decisions. | Junior Achievement Student Study Guide and Companion Text, Economics (Glencoe), Odysseyware tax, interest rates, public policy, revenue, |
| | E 1.4.1 | Public Policy and the Market – Analyze the impact of a change in public policy (such as an increase in the minimum wage, a new tax policy, or a change in interest rates) on consumers, producers, workers, savers, and investors. | |
| | E 1.4.2 | Government and Consumers – Analyze the role of government in protecting consumers and enforcing contracts, (including property rights), and explain how this role influences the incentives (or disincentives) for people to produce and exchange goods and services. | |
| | E 1.4.3 | Government Revenue and Services – Analyze the ways in which local and state governments generate revenue (e.g., income, sales, and property taxes) and use that revenue for public services (e.g., parks and highways). | |
| | E 1.4.4 | Functions of Government – Explain the various functions of government in a market economy including the provision of public goods and services, the creation of currency, the establishment of property rights, the enforcement of contracts, correcting for externalities and market failures, the redistribution of income and wealth, regulation of labor (e.g., minimum wage, child labor, working conditions), and the promotion of economic growth and security. | |
| | E 1.4.5 | Economic Incentives and Government – Identify and explain how monetary and non-monetary incentives affect government officials and voters and explain how government policies affect the behavior of various people including consumers, savers, investors, workers, and producers. | |
| Unit 4: Understanding National Markets (days) | | | |
| Unit Focus | Standards | Resources | Unit Vocabulary |
| -factors that affect the national market | E 2.1 | Describe inflation, unemployment, output, and growth, and the factors that cause changes in those conditions, and describe the role of money and interest rates in national markets. | Junior Achievement Student Study Guide and Companion Text, Economics (Glencoe), Odysseyware money supply, inflation, recession, Federal Reserve, income, unemployment, gross domestic product, expenditures, global economy |
| | E 2.1.1 | Income – Describe how individuals and businesses earn income by selling productive resources. | |
| | E 2.1.2 | Circular Flow and the National Economy – Using the concept of circular flow, analyze the roles of and the relationships between households, business firms, financial institutions, and government and nongovernment agencies in the economy of the United States. | |

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| E 2.1.3 | Financial Institutions and Money Supply – Analyze how decisions by the Federal Reserve and actions by financial institutions (e.g., commercial banks, credit unions) regarding deposits and loans, impact the expansion and contraction of the money supply. | | |
| E 2.1.4 | Money Supply, Inflation, and Recession – Explain the relationships between money supply, inflation, and recessions. | | |
| E 2.1.5 | Gross Domestic Product (GDP) and Economic Growth – Use GDP data to measure the rate of economic growth in the United States and identify factors that have contributed to this economic growth. | | |
| E 2.1.6 | Unemployment – Analyze the character of different types of unemployment including frictional, structural, and cyclical. | | |
| E 2.1.7 | Economic Indicators – Using a number of indicators, such as GDP, per capita GDP, unemployment rates, and Consumer Price Index, analyze the characteristics of business cycles, including the characteristics of peaks, recessions, and expansions. | | |
| E 2.1.8 | Relationship Between Expenditures and Revenue (Circular Flow) – Using the circular flow model, explain how spending on consumption, investment, government and net exports determines national income; explain how a decrease in total expenditures affects the value of a nation’s output of final goods and services. | | |
| E 2.1.9 | American Economy in the World – Analyze the changing relationship between the American economy and the global economy including, but not limited to, the increasing complexity of American economic activity (e.g., outsourcing, off-shoring, and supply-chaining) generated by the expansion of the global economy. (National Geography Standard 11, p. 206) | | |

Unit 5: Role of Government in the United States Economy (days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|---|----------------|--|---|--|
| -role of government in the U.S. economy | E 2.2 | Analyze the role of government in the United States economy by identifying macroeconomic goals; comparing perspectives on government roles; analyzing fiscal and monetary policy; and describing the role of government as a producer and consumer of public goods and services. Analyze how governmental decisions on taxation, spending, protections, and regulation impact macroeconomic goals. | Junior Achievement Student Study Guide and Companion Text, Economics (Glencoe), Odysseyware | taxation, regulation, macroeconomic, public services |
| | E 2.2.1 | Federal Government and Macroeconomic Goals – Identify the three macroeconomic goals of an economic system (stable prices, low unemployment, and economic growth). | | |
| | E 2.2.2 | Macroeconomic Policy Alternatives – Compare and contrast differing policy recommendations for the role of the Federal government in achieving the macroeconomic goals of stable prices, low unemployment, and economic growth. | | |
| | E 2.2.3 | Fiscal Policy and its Consequences – Analyze the consequences – intended and unintended – of using various tax and spending policies to achieve macroeconomic goals of stable prices, low unemployment, and economic growth. | | |

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| | E 2.2.4 | Federal Reserve and Monetary Policy – Explain the roles and responsibilities of the Federal Reserve System and compare and contrast the consequences – intended and unintended – of different monetary policy actions of the Federal Reserve Board as a means to achieve macroeconomic goals of stable prices, low unemployment, and economic growth. | | |
| | E 2.2.5 | Government Revenue and Services – Analyze the ways in which governments generate revenue on consumption, income and wealth and use that revenue for public services (e.g., parks and highways) and social welfare (e.g., social security, Medicaid, Medicare). | | |

QUARTER 2

Unit 6: Economic Systems (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|-----------|---|---|
| -differences between various economic systems | E 3.1 | Junior Achievement Student Study Guide and Companion Text, Economics (Glencoe), Odysseyware | free market, command economy, mixed systems, socialism, |
| -influence of international organizations on the world economy | E 3.1.1 | | World Trade Organization, World Bank, International Monetary Fund, foreign policy, standard of living |
| | E 3.1.2 | | |
| | E 3.1.3 | | |
| | E 3.1.4 | | |
| | E 3.1.5 | | |
| | E 3.1.6 | | |

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Unit 7: Economic Interdependence - Trade (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|-----------|---|---|
| -the effect of trade on the global economy | E 3.2 | Describe how trade generates economic development and interdependence and analyze the resulting challenges and benefits for individuals, producers, and government. | Junior Achievement Student Study Guide and Companion Text, Economics (Glencoe), Odysseyware |
| | E 3.2.1 | Absolute and Comparative Advantage – Use the concepts of absolute and comparative advantage to explain why goods and services are produced in one nation or locale versus another. (National Geography Standard 11, p. 206) | |
| | E 3.2.2 | Domestic Activity and World Trade – Assess the impact of trade policies (i.e. tariffs, quotas, export subsidies, product standards and other barriers), monetary policy, exchange rates, and interest rates on domestic activity and world trade. (National Geography Standard 11, p. 206) | |
| | E 3.2.3 | Exchange Rates and the World Trade – Describe how interest rates in the United States impact the value of the dollar against other currencies (such as the Euro), and explain how exchange rates affect the value of goods and services of the United States in other markets. (National Geography Standard 11, p. 206) | |
| | E 3.2.4 | Monetary Policy and International Trade – Analyze how the decisions made by a country’s central bank (or the Federal Reserve) impact a nation’s international trade. (National Geography Standard 13, p. 210) | |
| | E 3.2.5 | The Global Economy and the Marketplace – Analyze and describe how the global economy has changed the interaction of buyers and sellers, such as in the automobile industry. (National Geography Standard 13, p. 210) | |

Unit 8: Decision Making (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|-----------|---|---|
| -elements of personal finance - importance of the decision-making process in personal financial dealings | E 4.1 | Describe and demonstrate how the economic forces of scarcity and opportunity costs impact individual and household choices. | Junior Achievement Student Study Guide and Companion Text, Economics (Glencoe), Odysseyware |
| | C 4.1.1 | Scarcity and Opportunity Costs – Apply concepts of scarcity and opportunity costs to personal financial decision making. | |
| | C 4.1.2 | Marginal Benefit and Cost – Use examples and case studies to explain and evaluate the impact of marginal benefit and marginal cost of an activity on choices and decisions. | |
| | C 4.1.3 | Personal Finance Strategy – Develop a personal finance strategy for earning, spending, saving and investing resources. | |
| | C 4.1.4 | Key Components of Personal Finance – Evaluate key components of personal finance including, money management, saving and investment, spending and credit, income, mortgages, retirement, investing (e.g., 401K, IRAs), and insurance. | |

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THE LEONA GROUP

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| | C 4.1.5 | Personal Decisions – Use a decision-making model (e.g., stating a problem, listing alternatives, establishing criteria, weighing options, making the decision, and evaluating the result) to evaluate the different aspects of personal finance including careers, savings and investing tools, and different forms of income generation. | | |
| | C 4.1.6 | Risk Management Plan – Develop a risk management plan that uses a combination of avoidance, reduction, retention, and transfer (insurance). | | |
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| Unit 3: (days) | | | |
|---|-----------|---|-----------------|
| Unit Focus | Standards | Resources | Unit Vocabulary |
| Growth of Islam and Dar al-Islam, Unification of Eurasia under the Mongols, The Plague | WHG4.2.1 | MIOpen Textbook; Ch. 1; World History text: Chapter10 The Muslim World; Chapter 11: Byzantines, Russians, and Turks Interac; Chapter 12: Empires in East Asia; Chapter 13: European Middle Ages; Chapter 14: The Formation of Western Europe; Chapter 15: Societies and Empires in Africa | pandemic |
| Unification of Eurasia under the Mongols | WHG4.2.2 | | |
| The Plague | WHG4.2.3 | | |
| Africa to 1500, The Americas to 1500, China to 1500, The Eastern European System and the Byzantine Empire to 1500, Western Europe to 1500 | WHG4.3 | | |
| | WHG4.3.2 | | |
| | WHG4.3.3 | | |
| QUARTER 2 | | | |
| Unit 4: (days)WHG Era 5 – The Emergence of the First Global Age, 15th to 18th Centuries | | | |
| Unit Focus | Standards | Resources | Unit Vocabulary |

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| Emerging Global System and World Religions | WHG5.1.1 | Emerging Global System – Analyze the impact of increased oceanic travel including changes in the global system of trade, migration, and political power as compared to the previous era. (See 4.1.3; 5.3.6) (National Geography Standard 11d, p. 207) | World History Text: Unit 4; 900-1500. Chapter 16: People and Empires in the Americas; Chapter 17: European Renaissance and Reformation; Chapter 18: The Muslim World Expands; Chapter 19: An Age of Exploration and | push/pull factors; indentured servitude; |
| European Exploration/Conquest and Columbian Exchange, Trans-African and Trans-Atlantic Slave Systems | WHG5.2.1 | European Exploration/Conquest and Columbian Exchange – Analyze the demographic, environmental, and political consequences of European oceanic travel and conquest and of the Columbian Exchange in the late 15th and 16th centuries by describing the geographic routes used in the exchange of plants, animals, and pathogens among the continents in the last 15th and the 16th centuries; explaining how forced and free migrations of peoples (push/pull factors) and the exchange of plants, animals, and pathogens impacted the natural environments, political institutions, societies, and commerce of European, Asian, African, and the American societies (See 5.3.5) (National Geography Standard 14d, p. 212). | | |
| Trans-African and Trans Atlantic Slave Systems | WHG5.2.2 | Trans-African and Trans-Atlantic Slave Systems – Analyze the emerging trans-Atlantic slave system and compare it to other systems of labor existing during this era by using historical and modern maps and other data to analyze the causes and development of the Atlantic trade system, including economic exchanges, the diffusion of Africans in the Americas (including the Caribbean and South America), and the Middle Passage; comparing and contrasting the trans-Atlantic slave system with the African slave system and another system of labor existing during this era (e.g., serfdom, indentured servitude, corvee labor, wage labor) (See 5.3.5.; 5.3.6) (See 4.3.1). | | |
| Ottoman Empire to 1800; East Asia, South Asia/India, Russia, Europe, and Latin America through 18th Century | WHG5.3.2 | East Asia through the 18th Century – Analyze the major political, religions, economic, and cultural transformations in East Asia by analyzing the major reasons for the continuity of Chinese society under the Ming and Qing dynasties, including the role of Confucianism, the civil service, and Chinese oceanic exploration (See 4.3.3) (National Geography Standard 5, p. 192) and analyzing the changes in Japanese society by describing the role of geography in the development of Japan, the policies of the Tokugawa Shogunate, and the influence of China on Japanese society (National Geography Standard 4, p. 190). | | |
| South Asia/India through the 18th century | WHG5.3.3 | South Asia/India through the 18th Century – Analyze the global economic significance of India and the role of foreign influence in the political, religious, cultural, and economic transformations in India and South Asia including the Mughal Empire and the beginnings of European contact. (See 4.1.2) (National Geography Standard 4, p. 190) | | |
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An Age of Exploration and Isolation; Chapter 20: The Atlantic World

Unit 5: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|-----------|---|---|
| Russia through the 18th century; Europe through the 18th century; Latin America through the 18th century | WHG5.3.4 | Russia through the 18th Century – Analyze the major political, religious, economic, and cultural transformations in Russia including Russian imperial expansion and top-down westernization/modernization (National Geography Standard 13, p. 210); the impact of its unique location relative to Europe and Asia (National Geography Standard 3, p. 188); the political and cultural influence (e.g., written language) of Byzantine Empire, Mongol Empire, & Orthodox Christianity (National Geography Standard 10, p. 203). | bureaucratic; nationalist; reformation; Enlightenment |
| | WHG5.3.5 | Europe through the 18th Century – Analyze the major political religious, cultural and economic transformations in Europe by explaining the origins, growth, and consequences of European overseas expansion, including the development and impact of maritime power in Asia and land control in the Americas (See 5.2.1) (National Geography Standard 13, p. 210); analyzing transformations in Europe’s state structure, including the rising military, bureaucratic, and nationalist power of European states including absolutism; analyzing how the renaissance, Reformation, Scientific Revolution, and the Enlightenment contributed to transformations in European society; analyzing the transformation of the European economies including mercantilism, capitalism, and wage labor (See 5.2.2). | |
| | WHG5.3.6 | Latin America through the 18th Century – Analyze colonial transformations in Latin America, including the near-elimination of American Indian civilizations and peoples; social stratifications of the population (e.g., peninsulares, creoles, mestizos); the regional and global role of silver and sugar; resource extraction and the emerging system of labor (e.g., mita, slavery) (See 5.1.1, 5.2.2) (National Geography Standard 12, p. 208). | |
| | | World History text: Unit 5, 1500-1800. Chapter 21: Absolute Monarchs in Europe; Chapter 22: Enlightenment and revolution; Chapter 23: The French Revolution and Napoleon; Chapter 24: Nationalist Revolutions Sweep the West | |

QUARTER 3

Unit 6: (days) WHG Era 6 – An Age of Global Revolutions, 18th Century-1914

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------|---|-----------|--|
| | <p>WHG6.1 Global Revolutions, World-Wide Migrations and Population Changes, Increasing Global Interconnections, Changes in Economic and Political Systems, Interpreting Europe’s Increasing Global Power</p> <p>WHG6.1.1 Global Revolutions – Analyze the causes and global consequences of major political and industrial revolutions focusing on changes in relative political and military power, economic production, and commerce. (See 6.2.1; 6.2.3; 6.3.1, 6.3.2) (National Geography Standard 13, 1. 210)</p> | | <p>constitutionalism; socialism; republicanism; capitalism; secularization</p> |

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and Nationalism;
Chapter 31: Years of
Crisis; Chapter 32:
World War II

Unit 8: (days) Europe, East Asia, and Africa

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------|--|---------------------------|-----------------|
| | <p>WHG6.3.1 Europe – Analyze the economic, political, and social transformations in Europe by analyzing and explaining the impact of economic development on European society (National Geography Standard 11, p. 206); explaining how democratic ideas and revolutionary conflicts influenced European society, noting particularly their influence on religious institutions, education, family life, and the legal and political position of women; using historical and modern maps to describe how the wars of the French Revolutionary and Napoleonic periods and growing nationalism changed the political geography of Europe and other regions (e.g., Louisiana Purchase) (National Geography Standard 13, p. 210).</p> | Chapter 30: Revolution ar | |
| | <p>WHG6.3.2 East Asia – Analyze the political, economic, and social transformations in East Asia by explaining key events in the modernization of Japan (Meiji Restoration) and the impact of the Russo-Japanese War (National Geography Standard 13, p. 210) and describing key events in the decline of Qing China, including the Opium Wars and the Taiping and Boxer Rebellions</p> | | |
| | <p>WHG6.3.3 Africa – Evaluate the different experiences of African societies north and south of the Sahara with imperialism (e.g., Egypt, Ethiopia and the Congo). (National Geography Standard 16, p. 216)</p> | | |
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QUARTER 4

Unit 9: (days) WHG Era 7 – Global Crisis and Achievement, 1900-1945

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|---|---|-----------------|
| Increasing Government and Political Power, Comparative Global Power, Twentieth Century Genocide, Global Technology, and Total War | <p>WHG7.1.1 Increasing Government and Political Power – Explain the expanding role of state power in managing economies, transportation systems, and technologies, and other social environments, including its impact of the daily lives of their citizens. (See 7.3.2)</p> | Chapter 31: Years of Crisis; Chapter 32: World War II | |

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| | WHG7.1.2 | Comparative Global Power – Use historical and modern maps and other sources to analyze and explain the changes in the global balance of military, political, and economic power between 1900 and 1945 (including the changing role of the United States and those resisting foreign domination). (National Geography Standard 13, p. 210) | Chapter 31: Years of Crisis | mass extermination; fascism; communism |
| | WHG7.1.3 | Twentieth Century Genocide – Use various sources including works of journalists, journals, oral histories, films, interviews, and writings of participants to analyze the causes and consequences of the genocides of Armenians, Romas (Gypsies), and Jews, and the mass exterminations of Ukrainians and Chinese. (See 7.2.3) | | |
| | WHG7.1.4 | Global Technology – Describe significant technological innovations and scientific breakthroughs in transportation, communication, medicine, and warfare and analyze how they both benefited and imperiled humanity. (National Geography Standard 11, p. 206) | | |
| | WHG7.1.5 | Total War – Compare and contrast modern warfare and its resolution with warfare in the previous eras; include analysis of the role of technology and civilians. (See 7.2.1; 7.2.3) (National Geography Standard 13, p. 210) | | |
| World War I, Inter-War Period, World War II, Revolutionary and/or Independence Movements | WHG7.2.2 | Inter-war Period – Analyze the transformations that shaped world societies between World War I and World War II by examining the causes and consequences of the economic depression on different regions, nations, and the globe; describing and explaining the rise of fascism and the spread of communism in Europe and Asia (See 7.3.1 and 7.3.2); comparing and contrasting the rise of nationalism in China, Turkey, and India (National Geography Standard 10, p. 203) | | |
| | WHG7.2.3 | World War II – Analyze the causes, course, characteristics, and immediate consequences of World War II by explaining the causes of World War II, including aggression and conflict appeasement that led to war in Europe and Asia (e.g., Versailles Treaty provisions, Italian invasion of Ethiopia, Spanish Civil War, rape of Nanjing, annexation of Austria and Sudetenland); explaining the Nazi ideology, policies, and consequences of the Holocaust (or Shoah) (See 7.3.2) (National Geography Standard 10, p. 203); analyzing the major turning points and unique characteristics of the war (See 7.1.5) (National Geography Standard 17, p. 219); explaining the spatial and political impact of the Allied negotiations on the nations of Eastern Europe and the world (See 8.1.4); analyzing the immediate consequences of the war’s end including the devastation, effects on population, dawn of the atomic age, the occupation of Germany and Japan (See 7.1.5; 8.1) (National Geography Standard 6, p. 154); describing the emergence of the United States and the Soviet Union as global superpowers (See 7.1.5; 8.1) (National Geography Standard 6, p.154). | | |
| Russian Revolution, Europe and the Rise of Fascism and Totalitarian States, Asia, The Americas, Middle East | WHG7.3.1 | Russian Revolution – Determine the causes and results of the Russian Revolution from the rise of Bolsheviks through the conclusion of World War II, including the five-year plans, collectivization of agriculture, and military purges. | | |
| | WHG7.3.3 | Asia – Analyze the political, economic, and social transformations that occurred in this era, including (National Geography Standard 13, p. 210) | | |
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Curriculum Map 2021-2022

| Unit 10: (days) WHG Era 8 – The Cold War and Its Aftermath: The 20th Century Since 1945 | | | | |
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| Unit Focus | Standards | | Resources | Unit Vocabulary |
| Origins of Cold War, Cold War Conflicts, End of Cold War, Mapping the 20th Century | WHG8.1.1 | Origins of the Cold War – Describe the factors that contributed to the Cold War including the differences in ideologies and policies of the Soviet bloc and the West; political, economic, and military struggles in the 1940s and 1950s; and development of Communism in China. (See 723) | Chapter 31: Years of Crisis | |
| | WHG8.1.2 | Cold War Conflicts – Describe the major arenas of conflict, including the decline of the Ottoman Empire; changes in the Arab world including the growth of Arab nationalism, rise of Arab nation-states, and the increasing complexity (e.g., political, geographic, economic, and religious) of Arab peoples; the role of the Mandate system; the discovery of petroleum resources. | | |
| | WHG8.1.3 | End of the Cold War – Develop an argument to explain the end of the Cold War and its significance as a 20th-century event, and the subsequent transitions from bi-polar to multi-polar center(s) of power. (National Geography Standard 13, p. 210) | | |
| | WHG8.1.4 | Mapping the 20th Century – Using post-WWI, post WWII, height of Cold War, and current world political maps, explain the changing configuration of political boundaries in the world caused by the World Wars, the Cold War, and the growth of nationalist sovereign states (including Israel, Jordan, Palestine). | | |
| The Legacy of Imperialism; Independence, Decolonization, and Democratization Movements; Middle East | WHG8.2.1 | The Legacy of Imperialism – Analyze the complex and changing legacy of imperialism in Africa, Southeast Asia, and Latin America during and after the Cold War such as apartheid, civil war in Nigeria, Vietnam, Cuba, Guatemala, and the changing nature of exploitation of resources (human and natural). (National Geography Standards 11 and 16, pp. 206 and 216) | | |
| | WHG8.2.2 | Independence, Decolonization, and Democratization Movements – Compare the independence movements and formation of new nations in the Indian Subcontinent, Africa, Eastern Europe, and Southeast Asia during and after the Cold War. (National Geography Standard 13 and 17, pp. 210 and 219) | | |
| | | Middle East – Analyze the interregional causes and consequences of conflicts in the Middle East, including the development of the state of Israel, Arab-Israeli disputes, Palestine, the Suez crisis, and the nature of the continuing conflict. (National Geography Standards 13 and 17, pp. 210 and 219) | | |
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Schedule 7d: Curriculum

Electives

- Accounting
- Creative Writing
 - Health
- Personal Finance
- Physical Education
 - STEM



Accounting I - 10-12, Semester I Curriculum Map

| September -- October | November | December – January |
|---|--|---|
| <ul style="list-style-type: none"> ● <i>Starting a Proprietorship: Changes that Affect the Accounting Equation (2 weeks)</i> ● <i>Analyzing Transactions into Debit and Credit Parts (2 weeks)</i> ● <i>Journalizing Transactions (2 weeks)</i> ● <i>Posting to a General Ledger (3 weeks)</i> | <ul style="list-style-type: none"> ● <i>Cash Control Systems (2 weeks)</i> ● <i>Work Sheet and Adjusting Entries for a Service Business (2 weeks)</i> ● | <ul style="list-style-type: none"> ● <i>Financial Statements for a Proprietorship (2 weeks)</i> ● <i>Recording Closing Entries and Preparing a Post-Closing Trial Balance for a Service Business (3 Weeks)</i> ● <i>MidTerm Exam Review (1 week)</i> |
| Accounting: Big Ideas | | |
| <ul style="list-style-type: none"> ✓ Accounting Equation ✓ Debit/Credit ✓ Journaling ✓ General Ledger | <ul style="list-style-type: none"> ✓ Cash Control ✓ Service Business | <ul style="list-style-type: none"> ✓ Proprietorship ✓ Trial Balance for Service Business |
| Learner Outcomes | | |
| <ul style="list-style-type: none"> ➤ Describe the different users of accounting information. ➤ Prepare a net worth statement and explain its purpose. ➤ Classify accounts as assets, liabilities, or owner's equity and demonstrate their relationship in the accounting equation. ➤ Analyze the effects of transactions on the accounting equation. ➤ Distinguish between cash and on account transactions. ➤ Compare and contrast the types of transactions that increase and decrease owner's equity. ➤ Explain the difference between expenses and | <ul style="list-style-type: none"> ➤ Record a deposit on a check stub. ➤ Endorse checks using blank, special, and restrictive endorsements. ➤ Prepare a check stub and a check. ➤ Complete a bank statement reconciliation. ➤ Record and journalize a bank service charge. ➤ Complete recordkeeping for a dishonored check. ➤ Journalize an electronic funds transfer. 8. Journalize a debit card transaction. ➤ Establish a petty cash fund. ➤ Prepare a petty cash report. ➤ Replenish a petty cash fund. ➤ Prepare the heading of a worksheet. | <ul style="list-style-type: none"> ➤ Prepare an income statement for a service business. ➤ Calculate and analyze financial ratios using income statement amounts. ➤ Prepare a balance sheet for a service business organized as a proprietorship. ➤ Journalize and post-closing entries for a service business organized as a proprietorship. ➤ Prepare a post-closing trial balance. <p>Standards: A.III, A.IV, A.V</p> |

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| <p>liabilities</p> <ul style="list-style-type: none"> ➤ Show the relationship between the accounting equation and a T-account. ➤ Identify the debit and credit side, the increase and decrease side, and the balance side of various accounts. ➤ Restate and apply the two rules that are associated with the increase side of an account. ➤ Restate and apply the four questions necessary to analyze transactions for starting a business into debits and credit parts. ➤ Analyze transactions for operating a business into debit and credit parts. ➤ Define what a journal is and explain why it is used to record transactions. ➤ Compare and contrast different types of source documents. ➤ Identify the four parts of a journal entry. ➤ Analyze and record cash transaction using source documents. ➤ Analyze and record transactions for buying and paying on account. ➤ Analyze and record transactions that affect owner's equity. ➤ Analyze and record sales and receipt of cash on account. ➤ Prove and rule a journal. ➤ Demonstrate how to prove cash. ➤ Identify and correct errors using standard accounting practices. ➤ Construct a chart of accounts for a service business organized as a partnership. ➤ Demonstrate correct principles of numbering accounts. ➤ Apply file maintenance principles to update a chart of accounts. ➤ Complete the steps necessary to open general ledger accounts. ➤ Post amounts from the General Debit and General Credit columns of a journal. ➤ Post column totals from a journal to ledger accounts. ➤ Analyze incorrect journal entries and prepare correcting entries. ➤ Demonstrate how to correct errors made during the posting process. <p>Standards: A.II, A.IV, A.V</p> | <ul style="list-style-type: none"> ➤ Prepare the trial balance section of a work sheet. ➤ Analyze and explain the adjustments for supplies and prepaid insurance. ➤ Complete the Adjustments columns of a work sheet. ➤ Prepare the Balance Sheet and Income Statement columns of a work sheet. ➤ Total and rule the work sheet. ➤ Apply the steps for finding errors on a worksheet. ➤ Journalize and post the adjusting entries for supplies and prepaid insurance. <p>Standards: A.II, A.III, A.IV, A.V</p> | |
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Required Vocabulary

- accounting liability
- account title
- accounting system
- owner's equity
- account balance
- accounting records
- accounting equation
- capital financial statements
- ethics revenue
- service business
- business ethics
- sale on account
- proprietorship
- transaction
- expense
- asset
- account
- withdrawals
- equities
- Taccount
- debit
- credit
- normal balance
- chart of accounts
- journal
- double-entry
- accounting receipt
- journalizing
- source document
- memorandum
- special amount
- column
- check
- proving cash
- general amount column
- invoice
- entry
- sales invoice
- ledger
- file maintenance
- posting
- general ledger
- opening an account
- correcting entry
- account number

- code of conduct
- restrictive endorsement
- debit card
- checking account
- postdated check
- petty cash
- endorsement
- bank statement
- petty cash slip
- blank endorsement
- dishonored check
- special endorsement
- electronic funds transfer
- fiscal period
- worksheet
- trial balance
- adjustments
- balance sheet
- income statement
- net income
- net loss

- stakeholders
- component percentage
- adjusting entries
- temporary accounts
- post-closing trial balance
- permanent account
- closing entries
- accounting cycle

SUGGESTED Resources

- Text
- Quizlet
- Online Resources

- Text
- Quizlet
- Online Resources

- Text
- Quizlet
- Online Resources



Accounting I - 10-12, Semester II Curriculum Map

| February - March | April - May | June |
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| <ul style="list-style-type: none"> ● <i>Accounting for Purchases and Cash Payments(2 weeks)</i> ● <i>Accounting for Sales and Cash Receipts (2 weeks)</i> ● <i>Accounting for Transactions Using a General Journal (2 weeks)</i> ● <i>Preparing Payroll Records (2weeks)</i> | <ul style="list-style-type: none"> ● <i>Accounting for Payroll and Taxes (2 weeks)</i> ● <i>Accounting for Uncollectible Accounts Receivables (2 weeks)</i> ● <i>Preparing Adjusting Entries and a Trial Balance (2 weeks)</i> ● <i>Financial Statements and Closing Entries for a Corporation (2 weeks)</i> | <ul style="list-style-type: none"> ● <i>Financial Statement Analysis (1 week)</i> ● <i>Final Exam Review (1 week)</i> |

Accounting: Big Ideas

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| <ul style="list-style-type: none"> ✓ Purchase and Cash ✓ Sales and Cash ✓ Journaling ✓ Payroll | <ul style="list-style-type: none"> ✓ Payroll and Taxes ✓ Uncollectible accounts ✓ Trial Balance ✓ Financial Statements | <ul style="list-style-type: none"> ✓ Final Statement |
|--|--|---|

Learner Outcomes

| | | |
|--|---|--|
| <ul style="list-style-type: none"> ➤ Distinguish among service, retail merchandising, and wholesale merchandising businesses. ➤ Identify differences between a sole proprietorship and a corporation. ➤ Explain the relationship between a subsidiary ledger and a controlling account. ➤ Describe accounting procedures used in ordering merchandise. ➤ Discuss the purpose of a special journal. ➤ Journalize purchases of merchandise on account using a purchases journal. ➤ Post merchandise purchases to an accounts payable ledger and a general ledger. ➤ Record cash payment using a cash payments journal. | <ul style="list-style-type: none"> ➤ Analyze a payroll transaction. ➤ Journalize a payroll including employee payroll taxes. Calculate and record employer payroll taxes. ➤ Prepare selected payroll tax reports. ➤ Pay and record withholding and payroll taxes. ➤ Explain the purpose of the allowance method for recording losses from uncollectible accounts. ➤ Estimate uncollectible accounts expense using an aging of accounts receivable. ➤ Record the adjusting entry for the allowance for uncollectible accounts. ➤ Write off an uncollectible account receivable. ➤ Account for the collection of an account receivable that was written off. | <ul style="list-style-type: none"> ➤ Analyze an income statement using vertical analysis. ➤ Perform vertical analysis of a balance sheet. ➤ Analyze a balance sheet using vertical analysis. ➤ Perform horizontal analysis on an income statement. ➤ Perform horizontal analysis on a balance sheet. 6. Calculate earnings per share. ➤ Calculate and interpret market ratios. ➤ Calculate and interpret liquidity ratios. <p>Standards: A.II, A.III, A.IV, A.V</p> |
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| <ul style="list-style-type: none"> ➤ Record replenishment of a petty cash fund. ➤ Post cash payments to an accounts payable ledger and a general ledger ➤ Explain the relationship between the accounts receivable ledger and its controlling account. ➤ Record sales on account using a sales journal. ➤ Post sales on account to an accounts receivable ledger and a general ledger. ➤ Record cash and credit card sales using a sales receipts journal. ➤ Journalize cash receipts on account using a cash receipts journal. ➤ Post cash receipts to an accounts receivable ledger and a general ledger ➤ Prepare a schedule of accounts receivable. ➤ Explain the purpose of a general journal. ➤ Account for purchases returns and allowances. ➤ Post a general journal to the accounts payable ledger and general ledger. ➤ Account for sales returns and allowances. ➤ Post a general journal to the accounts receivable ledger and general ledger. ➤ Record a correcting entry to the accounts receivable ledger. Explain the relationship between retained earnings and dividends. ➤ Account for the declaration and payment of dividends. ➤ Explain how employees are paid. ➤ Calculate hourly employee earnings. ➤ Demonstrate the process for determining federal income tax withholdings. ➤ Demonstrate the process for calculating social security and Medicare taxes. ➤ Explain the benefit of funding medical and retirement plans with pretax contributions. ➤ Prepare employee earnings records. ➤ Justify the use of a payroll checking account. ➤ Prepare employee payroll checks. <p>Standards: A.II, A.III, A.IV, A.V</p> | <ul style="list-style-type: none"> ➤ Recorded the acceptance of a note receivable. ➤ Account for the collection of a note receivable. ➤ Account for a dishonored note receivable ➤ Prepare an unadjusted trial balance. ➤ Adjust supplies and prepaid insurance. ➤ Adjust merchandise inventory. ➤ Adjust interest receivable. ➤ Calculate depreciation expense using the straight-line method. ➤ Adjust accumulated depreciation. ➤ Post adjusting entries. ➤ Adjust federal income tax payable. prepare an adjusted trial balance. ➤ Prepare an income statement for a merchandising business organized as a corporation. ➤ Prepare a statement of stockholders' equity. ➤ Prepare a balance sheet for a business organized as a corporation. ➤ Prepare closing entries. ➤ Prepare a post-closing trial balance. <p>Standards: A.II, A.III, A.IV, A.V</p> | |
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Required Vocabulary

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| <ul style="list-style-type: none"> ● merchandise ● cost of merchandise ● purchase discount ● merchandise business ● markup ● general amount column ● retail merchandising business | <ul style="list-style-type: none"> ● federal unemployment tax ● state unemployment tax ● lookback period ● Employee Earnings Record ● Medicare Tax ● Net Pay ● Pay period payroll | <ul style="list-style-type: none"> ● current ratio ● acceptable current ratio ● current assets ● quick ratio ● networking capital ● liquidity |
|---|--|---|

- vendor
- list price
- wholesale
- merchandising business
- purchase on account
- trade discount
- corporation
- purchases journal
- contra account
- share of stock
- special amount column
- cash short
- capital stock
- purchase invoice
- cash over
- stockholder
- term of sale
- purchases return
- special journal
- cash payments journal
- purchases allowance
- cash discount
- debit memorandum
- Customer
- Sales Tax
- Sales Journal
- Cash Sale
- Credit Card Sale
- Point-of-sale (POS)
- Terminal Summary
- Batch Report
- Batching Out
- Cash Receipts
- Journal Sales
- Discount Sales
- Return Sales
- Allowance
- Credit Memorandum
- Subsidiary ledger
- Accounts payable ledger
- Accounts receivable ledger
- Controlling account
- Schedule of accounts payable
- Schedule of accounts receivable
- Employee Earnings Record
- Medicare Tax
- Net Pay
- Pay period payroll
- Payroll Register
- Payroll Taxes
- Salary

- Payroll Register
- Payroll Taxes
- Salary
- Social Security Tax
- Tax Base
- Total earnings
- Withholding allowance
- Salary expense
- Federal Unemployment
- State unemployment tax
- Deposit
- Promissory Note
- Creditor
- Note Payable
- Principal
- Term (time)
- Issue Date
- Payee
- Interest Rate
- Maturity Date/Value
- Maker
- Current Liabilities
- Long-Term Liabilities
- Interest - Bearing Note

- solvency
- debt to equity ratio
- times interest earned ratio
- net profit
- gross profit ratio
- earnings per share
- return on assets
- asset turnover

| | | |
|--|---|---|
| <ul style="list-style-type: none"> • Social Security Tax • Tax Base • Total earnings • Withholding allowance | | |
| Resources | | |
| <ul style="list-style-type: none"> • Text • Quizlet • Online Resources | <ul style="list-style-type: none"> • Text • Quizlet • Online Resources | <ul style="list-style-type: none"> • Text • Quizlet • Online Resources |

Curriculum Map 2019-2020



QUARTER 1

Unit 1: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|-----------------|-----------|--|---|
| What is poetry? | L.6.5 | Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. | http://www.flocabulary.com figurative language; rhyme scheme; simile; metaphor; sound devices |
| | L.6.5b | Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words. | |
| | L.6.5c | Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., stingy, scrimping, economical, unwasteful, thrifty). | |
| | L.6.6 | Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. | |
| | | | |

Unit 2: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|-----------------|---------------|--|--|
| Types of poetry | L.6.5 | Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. | http://www.flocabulary.com limerick; sonnet; free verse; haiku; ballad |
| | L.6.2 | Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. | |
| | RL.6.5 | Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot. | |

Unit 3: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--------------------------|---------------|--|--|
| Create a poetry handbook | SL.6.6 | Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 6 Language standards 1 and 3 for specific expectations.) | http://www.flocabulary.com figurative language; rhyme scheme; simile; metaphor; sound devices; limerick; sonnet; ballad; haiku; free verse; alliteration |
| | W.6.9a | Apply grade 6 Reading standards to literature (e.g., "Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics"). | |
| | W.6.6 | Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting. | |

QUARTER 2

Unit 4: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|------------------------|---------------|---|--|--|
| What is a short story? | RL.6.2 | Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. | connotation; denotation; summarize; resolution | |
| | RL.6.3 | Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution. | | |
| | RL.6.4 | Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone | | |
| | | | | http://www.flocabulary.com https://owlcation.com/aca "The Fun They Had;" "Ruthless;" "Answer;" "There Once Was;" "The Flowers;" "The Outing;" "I Don't Need Anything From Here;" |
| | | | | Videos: Onomatopoeia; Similes and Metaphors; Rhyme and Rhythm |
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Unit 5: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|------------|-----------|-----------|-----------------|
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Curriculum Map 2019-2020



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Unit 8: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
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QUARTER 4

Unit 9: (days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|-----------------------|---------------|---|---|
| Writing persuasively. | RL.6.2 | Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. | http://www.flocabulary.com |
| | RL.6.3 | Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution. | |
| | RL.6.5 | Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot. | |
| | W.6.1a | Introduce claim(s) and organize the reasons and evidence clearly. | |
| | W.6.1b | Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. | |
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commercial; advertising; claim



DETROIT
Public Safety Academy

Health Curriculum Map

| September - October | November - December | January |
|--|--|--|
| <ul style="list-style-type: none"> ● <i>Healthy Foundation</i> ● <i>Physical Activity and Nutrition</i> ● <i>Mental and Emotional Health</i> ● <i>Promoting Safe and Healthy Relationships</i> | <ul style="list-style-type: none"> ● <i>Personal Care and Body Systems</i> ● <i>Growth and Development</i> ● <i>Drugs</i> | <ul style="list-style-type: none"> ● <i>Disease and Disorders</i> ● <i>Injury Prevention and Environmental Health</i> |
| Health: Big Ideas | | |
| <ul style="list-style-type: none"> ● How can promoting healthy behaviors help prevent disease? ● Describe ways to promote health and reduce risks. ● What are the advantages of peacefully resolving conflicts? ● Describe the decision-making process. ● Analyze the relationship between regular physical activity and disease prevention. ● Explain the relationship between nutrition, quality of life, and disease. ● Identify the characteristics of good mental and emotional health. ● Identify the qualities and character traits that promote healthy relationships with peers, family, and friends. | <ul style="list-style-type: none"> ● Identify the major systems of the body. ● Describe the changes the body undergoes during the stage of adolescence. ● Explain the different effects drugs have on the body. | <ul style="list-style-type: none"> ● What are pathogens? ● What is the difference between communicable and non-communicable diseases? ● In what ways are diseases spread? ● Analyze the strategies for preventing disease and injury. ● Describe First Aid. |
| Learner Outcomes | | |

| | | |
|---|--|---|
| <p>Standards:</p> <p>High School Area Content Expectations:</p> <p>Strand 1: Standards 1-14</p> <p>Strand 4: Standards 1-14</p> <p>Strand 5: Standards 1-13</p> <p>*See appendix for standard description.</p> | <p>Standards:</p> <p>High School Area Content Expectations:</p> <p>Strand 2: Standards 1-11</p> <p>Strand 7: Standards 1-10</p> <p>*See appendix for standard description.</p> | <p>Standards:</p> <p>High School Area Content Expectations:</p> <p>Strand 3: Standards 1-17</p> <p>Strand 6: Standards 1-8</p> <p>*See appendix for standard description.</p> |
|---|--|---|

Required Vocabulary

| | | |
|---|--|---|
| <p>Health</p> <p>Wellness</p> <p>Prevention</p> <p>Health literacy</p> <p>Heredilty</p> <p>Environment</p> <p>Risk behaviors</p> <p>Cumulative risks</p> <p>Abstinence</p> <p>Stress management</p> <p>Conflict resolution</p> <p>Goal setting</p> <p>Character</p> <p>Role model</p> <p>Health consumer</p> <p>Media</p> <p>Preventive measures</p> <p>PCP</p> <p>Health Care</p> <p>HMO</p> <p>PPO</p> <p>Malpractice</p> <p>Sedentary lifestyle</p> <p>Metabolism</p> <p>Cardiorespiratory</p> <p>Aerobic</p> <p>Anaerobic</p> <p>BMI</p> <p>Eating disorders</p> <p>Maslow’s Hierarchy of Need</p> <p>Stressors</p> | <p>Axial skeleton</p> <p>Appendicular skeleton</p> <p>Muscular system</p> <p>Nervous system</p> <p>Cardiovascular</p> <p>Respiratory system</p> <p>Digestive system</p> <p>Urinary system</p> <p>Endocrine system</p> <p>Reproduction</p> <p>Life cycle</p> <p>Prenatal care</p> <p>STDs</p> <p>Genetics</p> <p>Adolescence</p> <p>Nicotine</p> <p>Addiction</p> <p>BAC</p> <p>Alcoholism</p> <p>Sobriety</p> <p>Vaccine</p> <p>Substance abuse</p> <p>Psychoactive drugs</p> <p>Marijuana</p> <p>Hallucinogens</p> <p>Narcotics</p> | <p>Pathogens</p> <p>Communicable diseases</p> <p>Antibodies</p> <p>Immunity</p> <p>Epidemics</p> <p>STIs</p> <p>HIV</p> <p>AIDS</p> <p>Pandemic</p> <p>Noncommunicable diseases</p> <p>Cancer</p> <p>Biopsy</p> <p>OSHA</p> <p>First aid</p> <p>CPR</p> |
|---|--|---|

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|---|---|---|
| Anxiety Abuse | | |
| SUGGESTED Resources | | |
| <ul style="list-style-type: none"> ● Atlas Rubicon/ ● Study Island ● United Streaming ● Scholas c Magazines ● Classroom Libraries ● Teachers Pay Teachers ● You Tube ● Building Resources | <ul style="list-style-type: none"> ● Atlas Rubicon/ ● Study Island ● United Streaming ● Scholas c Magazines ● Classroom Libraries ● Teachers Pay Teachers ● You Tube ● Building Resources | <ul style="list-style-type: none"> ● Atlas Rubicon/ ● Study Island ● United Streaming ● Scholas c Magazines ● Classroom Libraries ● Teachers Pay Teachers ● You Tube ● Building Resources |

Personal Finance Curriculum Map 2019-20



QUARTER 1

Unit 1: Personal Finance (45 days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|--|-------------------------------|-----------|---|
| <ul style="list-style-type: none"> - Introduction to Traditional Income - Planning Your Future - Careers - Taxes and My Income | | | <ul style="list-style-type: none"> - Income Tax - Medicare - Social Security - Taxes - Career Cluster - Abilities - Income - Interest - Values - Wanted Skills - Academic Knowledge and Technical Skills - Success Skills |
| | Career Exploration Tool | | |
| | Career Choice Research | | |
| | Being an Entrepreneur | | |
| | Starting a Lawn Care Business | | |
| | STEM Careers | | |
| | Social Security and Medicare | | |
| | Sales Receipt Analysis | | |
| How to Complete a 1040-EZ Income Tax Form | | | |

QUARTER 2

Unit 2: Traditional Saving, Investing, Risk Management (45 days)

| Unit Focus | Standards | Resources | Unit Vocabulary |
|---|---|-----------|--|
| <ul style="list-style-type: none"> - Saving and Investing - Risk Management | | | <ul style="list-style-type: none"> - Bond - Financial Institution - Interest - Invest - Mutual Fund - Opportunity Cost - Pay Yourself First (PYF) - Principal - Risk - Savings Account - Stock - |
| | Understanding College Cost and the FAFSA | | |
| | Understanding Stock Quotes | | |
| | Roth IRA's: Teens and Retirement Savings | | |
| | Compound Interest and the Rule of 72 | | |
| | Savings, USA Risk and Insurance (Online Lesson) | | |

QUARTER 3

Unit 3: Traditional Debit and Credit (45 days)

| Unit Focus | Standards | Resources | Unit Vocabulary | |
|---|--|--|---|--|
| <ul style="list-style-type: none"> - Banking Partners - Personal Spending - Savvy Shopping - Managing Credit - | | <ul style="list-style-type: none"> - - | <ul style="list-style-type: none"> - Bank - Credit Union - Financial Institution - Interest - Interest Bank - Mobile Banking - Online Banking - Bankruptcy - Cash - Check | |
| | Checks and Checking Accounts/ Check Writing and keeping a check register to track checks, deposits withdrawals and automatic electronic payments | | | |
| | Installment Debt/Students become aware that an installment debt can be considerably greater than the original purchase price of an item | | | |
| | Rent or Home Ownership/Compare the benefits and responsibilities that come with renting or owning a home. | | | |
| | Leasing vs. Buying a Car/Students assess the pluses and minuses of leasing or buying a car | | | |
| Identity theft/Students learn about steps they can take to help protect their payment cards and personal identity from theft. | | | | |



DETROIT
Public Safety Academy

Physical Education –High School Curriculum Map

| Motor Skills | Physical Fitness | Cognitive Concepts |
|--|--|--|
| <ul style="list-style-type: none"> • <i>Soccer</i> • <i>Flag Football</i> • <i>Kickball</i> • <i>Dodgeball</i> • <i>Volleyball</i> • <i>Basketball</i> • <i>Running/Walking</i> | <ul style="list-style-type: none"> • <i>Daily Warm Up</i> • <i>Plyometrics</i> • <i>Stretching</i> • <i>Team and Individual Sports (see Motor Skills)</i> | <ul style="list-style-type: none"> • <i>Daily Warm Up</i> • <i>Plyometrics</i> • <i>Stretching</i> • <i>Team and Individual Sports (see Motor Skills)</i> |
| Big Ideas | | |
| <ul style="list-style-type: none"> • Demonstrate competence in the following activities: swimming; personal condition; individual, dual and team sports; and recreational activities. • Participate in a variety of physical activities appropriate for enhancing muscular strength and endurance. • Assess personal status of muscular strength and endurance of the arms, shoulders, and abdomen. • Meet standards on selected fitness activities that develop and maintain muscular strength and endurance of the arms, shoulders, and abdomen. | <ul style="list-style-type: none"> • Assess personal status of flexibility. • Participate in a variety of physical activities appropriate for enhancing flexibility. • Assess personal status of body composition. • Demonstrate slow and fast movement speeds, balance, coordination, and body awareness. | <ul style="list-style-type: none"> • Detect and correct errors in personal skill performance. • Recognize the importance of repetition in mastery of skill. • Analyze strategies in physical activities. • Use appropriate rules, strategies and etiquette in physical activities. • Follow and encourage others to follow the rules while participating in physical activities. • Describe psychological effects of right kinds of regular amounts of physical activity (e.g., healthy physical |

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| <ul style="list-style-type: none"> • Meet standards on selected fitness activities on selected fitness activities that develop and maintain cardiorespiratory endurance (e.g., times or distance walk/run and other endurance activities at specified heart rate/heart rate recovery). • Participates in a variety of physical activities appropriate for enhancing cardiorespiratory endurance. • Assess personal status of cardiorespiratory endurance. | | <p>self-image, ability to reduce stress, strong mental function, and emotional health.</p> <ul style="list-style-type: none"> • Describe the activities and opportunities to develop sportsmanship, leadership and cooperation. • Identify lifelong physical leisure activities which one enjoys and would like to pursue. |
|--|--|--|

Learner Outcomes

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|--|---|--|
| <p>Standards:</p> <p>High School Area Content Expectations:</p> <p>Content Standard 5: All students will participate successfully in selected health- enhancing, lifelong physical activities.</p> <p>Content Standard 6: All students will develop and maintain healthy levels of cardiorespiratory endurance.</p> <p>Content Standard 7: All students will develop and maintain healthy levels of muscular strength and endurance.</p> | <p>Standards:</p> <p>High School Area Content Expectations:</p> <p>Content Standard 8: All students will develop and maintain healthy levels of flexibility of body joints.</p> <p>Content Standard 9: All students will recognize and understand the benefits of healthy body composition.</p> <p>Content Standard 10: All students will apply the concepts of body awareness, time, space, direction and force to movement.</p> | <p>Standards:</p> <p>High School Area Content Expectations:</p> <p>Content Standard 11: All students will explain and apply the essential steps in learning motor skills.</p> <p>Content Standard 12: All students will explain and apply appropriate rules and strategies when participating in physical education activities.</p> <p>Content Standard 13: All students will describe the effects of activity and inactivity. Students will formulate examples of lifestyle choices that result in the development and maintenance of health related fitness.</p> |
|--|---|--|

Required Vocabulary

| | | |
|--|--|---|
| <p>Hand-eye coordination Teamwork Team Specific Terminology Cardiorespiratory Exercise Aerobic Anaerobic</p> | <p>Plyometrics Flexibility BMI Healthy weight gain/weight loss</p> | <p>Sportsmanship Streesors Stress Management Stress Relief Self Image Leadership Role Model</p> |
|--|--|---|

| | | |
|--|---|---|
| Endurance Stamina Muscular strength Muscle Memory | | Diseases Muscle Atrophy Aging |
| SUGGESTED Resources | | |
| <ul style="list-style-type: none"> ● Atlas Rubicon ● United Streaming ● Teachers Pay Teachers ● You Tube ● Building Resources | <ul style="list-style-type: none"> ● Atlas Rubicon/ ● United Streaming ● Teachers Pay Teachers ● You Tube ● Building Resources | <ul style="list-style-type: none"> ● Atlas Rubicon/ ● United Streaming ● Teachers Pay Teachers ● You Tube ● Building Resources |
| Personal and Social Behaviors and Values | | |
| <ul style="list-style-type: none"> ● <i>Daily Warm Up</i> ● <i>Plyometrics</i> ● <i>Wrap-up Discussions</i> ● <i>Team and Individual Sports (see Motor Skills)</i> | | |
| Big Ideas | | |
| <ul style="list-style-type: none"> ● Demonstrate appropriate behaviors which exemplify each of the following personal/social character traits: compassion, confidence, cooperation, fairness, honesty, perseverance, respect, responsibility, and self- discipline. ● Choose to exercise regularly outside the classroom for personal enjoyment and benefit. ● Accept the differences between individual's personal characteristics and skills. | | |
| Learner Outcomes | | |
| Standards: | | |
| High School Area Content Expectations: | | |
| Content Standard 14: All students will demonstrate appropriate behavior while participating in physical activities. | | |
| Content Standard 15: All students will understand the value of physical activity and its contribution to lifelong health and well-being. | | |
| Required Vocabulary | | |
| Character Perseverance Cooperation | | |

Respect
Self discipline
Responsibility
Skill Sets
Life-long Well Being

SUGGESTED Resources

- Atlas Rubicon
- United Streaming
- Teachers Pay Teachers
- You Tube
- Building Resources



Course at a Glance Units of Study: STEM, Semester 1

| September - October | October-November | December - January |
|---|--|---|
| <ul style="list-style-type: none"> Unit 1: Energy & Power | <ul style="list-style-type: none"> Unit 1: Energy & Power Unit 2: Materials & Structures | <ul style="list-style-type: none"> Unit 2: Materials & Structure |
| : Big Ideas | | |
| <ul style="list-style-type: none"> There is a relationship between energy and power There is a need for clear and concise communication | <ul style="list-style-type: none"> There are many different fields of study possible Laws of Motion describe the interaction of forces on a body | <ul style="list-style-type: none"> There is a constant evaluation of materials used in engineering - to find the best possible one to provide the biggest advantage |
| Unit Expectations | | |
| <p>Students will view themselves as engineers and master the following common core content standards:</p> <p>Standards: Next Generation Science Standards</p> <p>HS-PS2 Motion and Stability: Forces and Interactions</p> <p>HS-PS2-1, HS-PS2-2, HS-PS2-3, HS-PS2-4, HS-PS2-5, HS-PS2-6</p> | <p>Students will view themselves as engineers and master the following common core content standards:</p> <p>Standards: Next Generation Science Standards</p> <p>HS-PS2 Motion and Stability: Forces and Interactions</p> <p>HS-PS2-1, HS-PS2-2, HS-PS2-3, HS-PS2-4, HS-PS2-5, HS-PS2-6</p> <p>HS-ETS1 Engineering Design</p> <p>HS-ETS1-1, HS-ETS1-2, HS-ETS1-3, HS-ETS1-4</p> | <p>Students will view themselves as engineers and master the following common core content standards:</p> <p>Standards: Next Generation Science Standards</p> <p>HS-ETS1 Engineering Design</p> <p>HS-ETS1-1, HS-ETS1-2, HS-ETS1-3, HS-ETS1-4</p> |
| SUGGESTED Resources | | |
| <ul style="list-style-type: none"> PLTW Principles of Engineering Curriculum | <ul style="list-style-type: none"> PLTW Principles of Engineering Curriculum | <ul style="list-style-type: none"> PLTW Principles of Engineering Curriculum |

| | | |
|--|--|--|
| <ul style="list-style-type: none"> Engineering Your Future Project Based Learning | <ul style="list-style-type: none"> Engineering Your Future Project Based Learning | <ul style="list-style-type: none"> Engineering Your Future Project Based Learning |
|--|--|--|



Course at a Glance Units of Study: STEM, Semester 2

| January - February | March - April | May - June |
|---|--|---|
| <ul style="list-style-type: none"> Unit 3: Control Systems | <ul style="list-style-type: none"> Unit 3: Control Systems Unit 4: Statistics & Kinematics | <ul style="list-style-type: none"> Unit 4: Statistics & Kinematics |

: Big Ideas

| | | |
|---|---|--|
| <ul style="list-style-type: none"> Control systems are needed to provide a consentient process control and reliability | <ul style="list-style-type: none"> Determine when to use open or closed systems Engineers use statistics to make informed decisions | <ul style="list-style-type: none"> Projectile motion can be predicted and controlled using Kinematics equations |
|---|---|--|

Unit Expectations

| | | |
|---|--|---|
| Standards: ETS1.A: Defining and Delimiting Engineering Problems | Standards: ETS1.B: Developing Possible Solutions | Standards: ETS1.C: Optimizing the Design Solution |
|---|--|---|

SUGGESTED Resources

| | | |
|---|---|---|
| <ul style="list-style-type: none"> PLTW Principles of Engineering Curriculum Engineering Your Future Project Based Learning | <ul style="list-style-type: none"> PLTW Principles of Engineering Curriculum Engineering Your Future Project Based Learning | <ul style="list-style-type: none"> PLTW Principles of Engineering Curriculum Engineering Your Future Project Based Learning |
|---|---|---|