

Task 1: Create a black and white county outline map of Michigan

To accomplish this task...	... Do these steps in ArcView for Windows or Macintosh...	
	... or do these special steps in ArcView for Windows	... or do these special steps in ArcView for Macintosh

Set up the computer for these directions.	(Win) Start ArcView for Windows, assuming data is stored in C:\ESRIDATA .	(Mac) Start ArcView for Macintosh, assuming data is stored in HD:\ESRIDATA .
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“I need a place to make the map.”

1. Create a place for the map to be displayed. (Maps are shown in “View” windows.)	Having just started ArcView, you have a brand new empty project. In the Project window, click the Views button, then click New .	
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“I need to get some data to map.”

2. Indicate that you want to add a theme (a mapable layer of geographic features).	Click the Add Theme button (looks like a “plus” sign).	
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“I need to go find the data.”

3. Navigate into the directory housing the needed data. (You need to know where to find the data and how to get there.)	(Win) In the central column of the Add Theme window, use the directory and drive pickers to click into the directory C:\ESRIDATA\USA .	(Mac) In the left column of the Add Theme window, use the folder picker to click into the folder HD:\ESRIDATA\USA .
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“I need to make sure I’m getting the right type of data.”

4. Ensure that the data type sought is the correct format. (ArcView can display different kinds of data.)	In the bottom of the Add Theme window, click and hold on the Data Source Type and choose Feature Data Source .	
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“I need to choose the right piece of data from the name available.”

5. Select the proper data source. (The correct item here will insert counties.)	(Win) In the left column, click the item called counties.shp , then click OK . The Theme will be added to the top of the Table of Contents window in the View.	(Mac) In the right column, click the item called counties.shp , then click Add . The theme will be added to the top of the Table of Contents window in the View.
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“I need to see what the stuff I added looks like.”

6. Display the map. (Themes do not display until they are turned on.)	In the Table of Contents , click the little checkbox at the left of the theme Counties.shp , making a black check mark appear. With over 3100 counties, it may take a while for them to draw.	
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“I need to restrict the features being displayed.”

7. Modify the theme properties. Call up the theme properties window.	From the Theme menu, choose Properties...	
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8. Modify the theme properties. Make a definition.	The left column of the Theme Properties window contains several large buttons. Highlight Definition , then click the Query Builder button (hammer with question mark).
9. Modify the theme properties. Construct the definition.	In the Query Builder window, in the left-hand column showing Fields, double-click [State_name]. In the central column, click the equals sign (“=”). Scroll down the right-hand column, find “ Michigan ”, and double-click it. (Using the mouse to select items, rather than typing, helps ensure proper syntax.)
10. Modify the theme properties. Check the definition.	The box in the bottom of the Query Builder window should read ([State_name] = “ Michigan ”). Note the presence and positions of parentheses, brackets, and quote marks. These need to be exact. If the statements don’t match, close the Query Builder and return to Step 9. When everything is correct, click OK .
11. Modify the theme properties. Apply the definition.	Back in the Theme Properties window, click OK . The computer will think for a second, sorting counties, and then close the Theme Properties window. The map will redraw.
“I need to zoom in to see everything.”	
12. Adjust the scale of display so the theme is properly visible.	Click the Zoom to Active Themes button (looks like an arrow pushing down on three layers arranged as light-dark-light). The map will redraw.
“I need to adjust the county color.”	
13. Adjust the county symbol. Call up the Legend Editor. (This process will provide many choices, this entails many steps.)	In the Table of Contents , double click directly on the name itself (not on the checkbox) for the theme Counties.shp .
14. Adjust the county symbol. Call up the symbol palette. (The symbol palette allows you to define many different elements of symbols.)	In the Legend Editor window, double click the color box shown for the county layer (bottom part of window, first box, left-hand column). The Symbol Palette will appear, with the Fill Palette option visible.
15. Adjust the county symbol. Specify the color palette window.	In the Fill Palette window, in the first row of icons, click the paintbrush to bring up the Color Palette window.
16. Adjust the county symbol. Set the color.	In the choices of colors, click on the top row, second column, which is white. Close the Color Palette window.
17. Adjust the county symbol. Apply the change.	In the Legend Editor , click Apply . Close the Legend Editor window. The map will re-draw.

“I need to change the map projection.”	
18. Indicate the need to change the characteristics of the View.	From the View menu, click Properties.... In the View Properties window, click the button for Projection....
19. Choose the desired projection.	Click the Category: pull-down menu to select State Plane – 1983 . Click the Type: pull-down menu to select Michigan, Central . Click OK .
20. Change the View name.	Back in the View Properties window, inside the line for Name: , erase View1 and type Michigan . Click OK .
“I need to save the project.”	
21. Indicate the need to save.	Click the Project Save button, on the top left.
22. Navigate to the desired directory.	Use the directory and drive selector to indicate where you want to save the file.
23. Change the project name.	In the filename blank, type task1.apr . Click Save .
“It’s all done!”	