Geographic Information Systems (GIS)
Adding and Styling Layers

Name:

Section:

Directions: Follow the directions below to make a Population Demographic Choroplath map

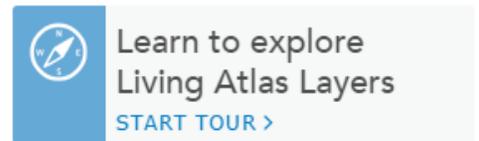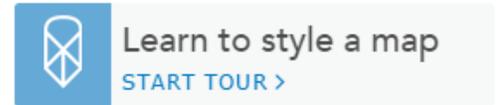**Reminder: Save Frequently as "Hispanic Population <User Name>"**

Step 1: Learning how to style your map and Add Layers

1. Navigate to **arcgis.com** and log in using your credentials
2. On the main screen navigate to a blank map by left clicking on the **Map** option on the top bar

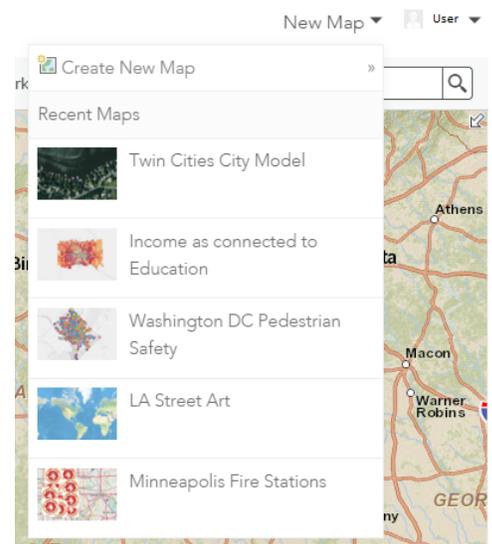Home   Gallery   Map   Scene   Groups   My Content   My Organization   2   User ▼   🔍

3. As a practice work through the step-by-step tutorial on how to style a map
   a. Left clock on the **Learn to Style a Map** tour on the left bar
      - This 14 step tour will show you how to do basic changes to map features
   b. Save your map, but before you close out your map add one more feature on the map that is marked by a red star that is 32 px large on St. Basil's Cathedral in Moscow, Russia
4. As a practice work through the step-by-step tutorial on how to find layers using the **Living Atlas**
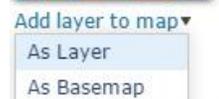   a. Work through the 8 steps on how to add a layer to a map using the Living Atlas.

Step 2: Adding a New Layer

1. Use the top menu to navigate to the Map
   a. If you already have the map open with information on it then click on the **New Map** option in the top right of the Map screen and left click **Create New Map**. This will open a new map without any added features and the default basemap
2. Change the Basemap
   a. On the top bar of the main screen left click on the ▦ Basemap button to open up the menu to change the basemap.
   b. Select the Light Gray Canvas
3. In the **search bar** in the right section of the top bar type in Miami, Florida, United States
   a. Your map will be zoomed in on central Miami. Make sure you close the **pop-up**.
4. On the top bar select to **Add** to add a layer to your map and left click on **Browse living Atlas Layers**
5. In the **Search Bar** type in "Ethnicity" or navigate through the **Demographics and Lifestyles** menu selection.
   a. Add the **2015 USA Tapestry Segmentation** to your map by either clicking on the image or by left clicking on **Add Layer to Map** and then selecting **As a Layer**.
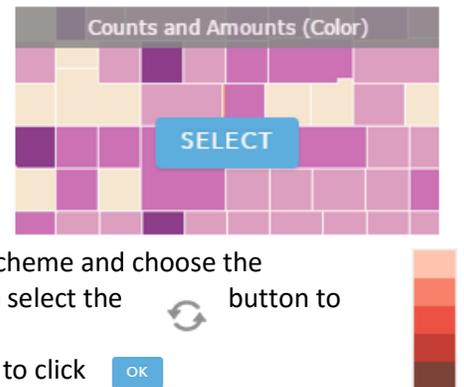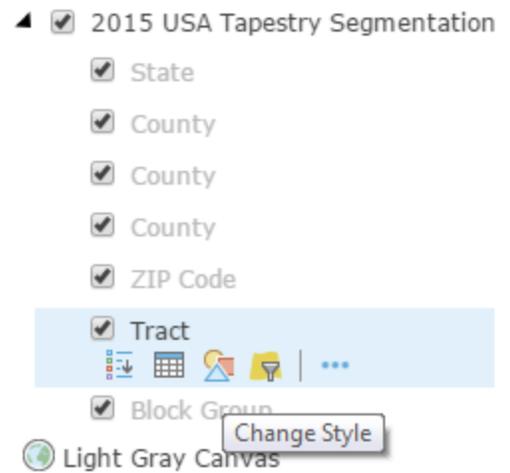   b. You can see there is also the option to add it as a basemap

Step 3: Styling Your Layer

1. In the left menu bar there is now a list of the layers on the map
   a. There should only be the **Light Gray Canvas** basemap and then the **2015 USA Tapestry Segmentation** layer
2. Scroll over with your mouse and left click on the 2015 USA Tapestry Segmentation layer
   a. This will open up a menu with the different layers that are part of the segmentation layer
   b. Click on the Tract sub-layer to open up the menu for stylizing this option and click on the symbology button ( ) to open the menu that will allow you to change the style of the layer
3. Right now the map is showing the dominant lifestyle of the people living in each tract and you want to change it to show the Hispanic population

   a. Under option **1** – **Choose an Attribute to show** click on it and scroll down to select 2014 Hispanic Population
   b. For option **2** – **Select a drawing style** select the Counts and Amounts (Color) option
   c. Once able click the **Options** button that is now an option on the Counts and Amounts (Color) style
   d. In the next menu that comes up select the Symbols option in the top right of the menu to change the color scheme and choose the progressively more red scheme in the third row and then select the   button to reverse it some darker red means more dense
   e. Leave the rest of the options as they are and scroll down to click OK
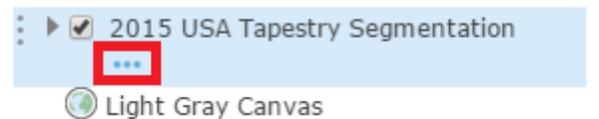   f. On the next menu click **Done** to finish editing

Step 4: Change the Pop-Up

1. Rename the Layer
   a. In the contents sidebar mouse over the layer titled 2015 USA Tapestry Segmentation once visible left click on the ••• symbol to open up the **More Options Menu**
   b. Mouse down to the **Rename** option and change the name of the layer to **2015 Hispanic Population**
2. Use the same method as described above to open up the **More Options Menu**
   a. This time click on the **Configure Pop-up** option
   b. A side menu will come up that allows you to change what pop-ups show. Change the **Name** in the **Pop-up Title** section by typing in "Census Tract" into the space provided.
   c. For **Pop-Up Contents** select that you would like the pop-up to display **A List of Field Attributes**
   d. Left-Click on Configure Attributes. In the menu that comes up de-select all of the fields. This will clear out all the options and then reselect the STATE_NAME (Change the Name Alias to just read as State instead of STATE_NAME), 2015 Total Population, 2015 Population Density, and 2015 Total Households boxes. Once they are selected click OK to close out the menu
3. Changing the Pop-Up Media
   a. Scroll down and click the ✖ button four times to remove all of the current Pop-Up Media selections.

b. Left click on the [ADD ▼] option and then select that you would like to add a **Pie Chart**.
c. Change the **Title** of the pie chart to read "Hispanics as Part of Population"
d. In the Caption write "The Pie Chart below shows the racial makeup of the selected census tract"
e. In the **Chart Field** options select the following boxes
   - 2014 Hispanic Population (Esri)
   - 2014 White Non-Hispanic Population (Esri)
   - 2014 Black/African American Non-Hispanic Population (Esri)
   - 2014 American Indian/Alaska Native Non-Hispanic Population (Esri)
   - 2014 Asian Non-Hispanic Population
   - 2014 Pacific Islander Non-Hispanic Population
f. Click [OK] to close out the menu
g. Once finished click the [SAVE POP-UP] button to close out the **Pop-Up Configuration Menu**
h. Take a moment to pan around and click on a couple census tracts to make sure the information and pop-ups are showing correctly.
i. Make sure you save your map, add a brief summary and a couple tags based on what the map is showing.

4. Congratulations you have made your own Demographic Choropleth Map!