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IGME 382

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WEEK 2 Lab

TASK 1 Investigate base maps:

**Question 1:** What value (if any) do you feel the World Hill shade layer adds to the

Base map?

* The world Hill shade layer helps to visualize how large the mountain ranges are on the map and their comparative elevations with one another due to shading techniques.

**Question 2:** How does the base map change as you zoom in? Is there more detail, new

additions to the map, etc.?

* Yes the base map gets more and more detailed as I zoom in and eventually show the roads and names of the places I zoom into.

**Question 3:** Base maps are described as multiscale, meaning they have different rendering

rules as you zoom in and out (see question above). What do you think would happen if they

were not multiscale?

* If the map was not multi scale it would look very empty as I were to zoom in their would be lesser degrees of detail and info leaving me without proper understandings of the area I was looking at.

**Question 4:** Pick three base maps and write a three-to-five word description for each (I’ve

given you an example, but feel free to reuse that map if you want!)

a. Colored Pencil Map: Sketched Roads and Lakes

b. Imagery: realistic, natural depiction, birds eye view.

c. Streets (night): google maps, in a clean straight forward design

d. Community map: plain, straight edged, simple

**Question 5:** You work for a firm and have been contracted by the City of Rochester to create a map for a community event at Cobbs Hill Park. The event organizer wants to make sure that the community will be able to know where different events will take place, including fishing at the lake, kickball, basketball, and hiking. Which base map would you choose and why?

* I would choose the Community map as it is a plain and simple way for those who want to learn about the attractions in their area to easily digest that information.

Task 2: Let’s Make a Thematic Map:

World Population using 5 Classes represented as Graduated Colors

Map

Description automatically generated

I choose this color scheme as it really makes the places with the highest population, particularly China pop out.

World Population using 5 Classes represented as Graduated Symbols

A picture containing text

Description automatically generated

I really appreciate this style of map as it clearly show the relation of which countries have larger populations as the circles have a clear hierarchy when comparing large with small circles. Where it struggles is when countries have similar numbers as its hard to distinguish the difference in the circles size when they are not very different.

World Population using 5 Classes represented as Proportional Symbols

Map

Description automatically generated

This solves some of the issues of the previous as map as the proportionality helps distinguish the difference however when the population is so large the circle becomes too large and obscures the map.

World Population using 5 Classes represented in a Dot Density Map

Map

Description automatically generated

I actually liked the default as when playing around with the numbers when lowering the dot value made the map more dese and raising it make it too empty.

18) when evaluating the usefulness of these maps I believe that the dot density or proportional symbols did the best job at explaining it, and if someone had little geo special technology understanding I would show them the proportional symbols map to easily explain the concept.

STEP 2: QGIS

Map

Description automatically generated

QGIS is a decent free software it seems pretty good but lacks some of the polish ArcGIS has.

TASK 3: Make a Map with the Right Projection

STEP1: – Add data and apply symbology

A picture containing diagram

Description automatically generated

Step 2: Projection

Diagram

Description automatically generated with low confidence

While they look similar the second map seems to be shifted slightly down. The state plane or second one is probably more accurate as it covers a smaller area when calculating the positioning of the map items.