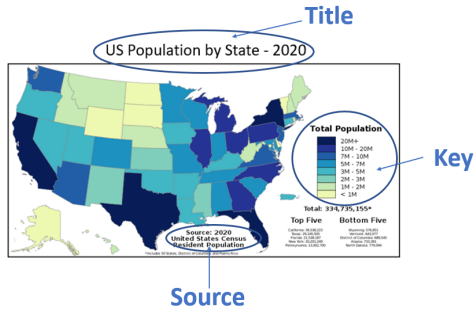


Unit 1: Thinking Geographically - Student Summary Sheet

Pay Attention to Clues on the Map!

Maps include important information such as title, key, compass rose, sources.



https://en.wikipedia.org/wiki/List_of_U.S._states_and_territories_by_population#/media/File:Population_by_U.S._state.svg

Scale of Analysis

Scale of Analysis - is the *level of map data that is displayed* such as at a regional, national, or local scale. This is important because the scale of analysis impacts how we interpret the data. For example - the map to the left uses a subnational (or local) scale of analysis since data is shown in localized units (e.g. Kentucky compared with Florida)

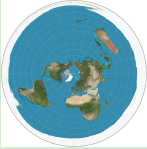
There is No Such Thing as a Perfect Map

Maps are designed to minimize distortion, but no map is perfect nor is there a perfect map projection. Different map projections are better or worse depending on the purpose. A way to consider the limitations of a map:

It is **SADD** but true, there is no such thing as a perfect map.

- S = Shape
- A = Area
- D = Distance
- D = Direction

Examples of Map Projections:

Projection	Map	SADD
Mercator	 https://en.wikipedia.org/wiki/Mercator_projection#/media/File:Mercator_projection_Sq	Distorts the size or area of landmasses making the poles look bigger and the regions along the equator look smaller; Preserves direction.
Robinson	 https://en.wikipedia.org/wiki/Robinson_projection#/media/File:Robinson_projection_SW.jpg	Compromise projection that attempts to minimize distortions by distorting shape, area, distance, and direction each a little instead of distorting one aspect a lot.
Gall-Peters	 https://en.wikipedia.org/wiki/Gall%E2%80%93Peters_projection#/media/File:Gall%E2%80%93Peters_projection_SW.jpg	Focuses on accuracy of area, but sacrifices shape as seen by continents looking more elongated.
Polar or Azimuthal	 https://en.wikipedia.org/wiki/Azimuthal_equidistant_projection#/media/File:Azimuthal_equidistant_projection_SW.jpg	Preserves distance and direction from the central point; Limited because it shows only a portion of the earth.