Globes and Maps
SOL WG.1c
Globes

- Globes are three dimensional representations of the earth
Advantages of Globes

- Globes are more accurate than maps
- Globes are not distorted
Disadvantages of Globes

▪ Globes are not portable
▪ Globes do not show detail
▪ Globes are more expensive than maps
▪ There are no thematic globes
Maps

- Maps are two dimensional representations of the earth
Advantages of Maps

- Maps are cheaper than globes
- Maps show detail
- Maps can show themes (thematic maps) and be used for comparing things
- Maps can be put into a book called an atlas
- Maps are portable
Disadvantages of Maps

- Maps are distorted because the earth is not flat
- Maps can distort shape, area, direction, and distance
- This problem is somewhat solved by different map projections
Map Projections

- Map projections are a way to draw maps in order to lessen distortion. There are different types of projections because people use maps for different reasons.
Mercator

- The Mercator is used by ship navigators

  How do you identify it?

a. It is square

b. The latitude and longitude lines are at right angles

c. The top and bottom of the map are heavily distorted (Greenland is ginormous!)
Polar
Polar

- The Polar projection is used by airline pilots because it shows the shortest distance between two points

  How do you identify it?

  a. It is a circle
  b. It only shows one hemisphere
  c. The latitude lines are circles
  d. The longitude lines radiate from the center
Robinson
Robinson

- The Robinson projection is used to compare data.

How do you identify it?

a. It has curved sides
b. The longitude lines curve towards the north and south pole
Different Types of Maps

- Political Maps
- Physical Maps
- Topographic Maps
- Thematic Maps
- Cartograms
Political Maps

- Political maps show man-made features such as cities, states, provinces, territories, or countries (Page 21)
Physical Maps

- Physical maps help you see the type of landforms and bodies of water in a specific area (Page 20)
Thematic Maps

- Thematic maps show specific types of information. Here are some examples of thematic maps:
  - Qualitative maps
  - Cartograms
  - Flow line maps
Thematic Maps

- Other types of thematic maps:
  - Population distribution and density
  - Economic activity
  - Resource
  - Language
  - Ethnicity
Thematic Maps

- Other types of thematic maps:
  - Climate
  - Precipitation
  - Vegetation
Small Scale Maps

- Maps can be large or small scale
- A small scale map shows a large area but without much detail.
- A small scale is used to see relative location in a region or between regions
Large Scale Maps

- A large scale map shows a small area with much more detail
- A large scale is used to see relative location within a region