Map Elements
In this activity you will:

- Learn about the elements of a map: latitude, longitude, the hemispheres, directions, time zone, scale, and map legends.
Latitude and Longitude

The earth is divided into lots of lines called **latitude** and **longitude**.
Lines

- Longitude lines run north and south.
- Latitude lines run east and west.
- The lines measure distances in degrees.
Where is 0 degree?

- The **equator** is 0 degree latitude.
- It is an imaginary belt that runs halfway point between the North Pole and the South Pole.
Where is 0 degree?

The **prime meridian** is 0 degrees longitude. This imaginary line runs through the United Kingdom, France, Spain, western Africa, and Antarctica.
Latitude and Longitude Resources

- **Latitude & Longitude Activity**
- **A Printable Latitude & Longitude Map of the World**
- **Latitude & Longitude Map Making**
- **Latitude and Longitude Quiz**
Hemispheres

By using the equator and prime meridian, we can divide the world into four hemispheres, north, south, east, and west.
A compass is a tool that helps the user know what direction one is headed.

On a map, a compass or a compass rose helps the user locate these directions.
Compass Rose

► The needle on a compass is magnetized to point to the earth's north magnetic pole. Thus with a compass, a person can roughly tell which direction they are headed.

► There are four major or cardinal directions on a compass- north, south, east & west. In between are the directions northeast, northwest, southeast, southwest.

► Direction Quiz

Source: http://aerocompass.larc.nasa.gov
Directions

► The cardinal directions are north, south, east, and west.

► The intermediate directions are northeast, southeast, southwest and northwest.

► They help describe the location of places in relation to other places.
Maps are made to scale; that is, there is a direct connection between a unit of measurement on the map and the actual distance.

For example, each inch on the map represents one mile on Earth. So, a map of a town would show a mile-long strip of fast food joints and auto dealers in one inch.
Time Zones

- The Earth is divided into 24 time zones, corresponding to 24 hours in a day.
- As the earth rotates, the sun shines in different areas, moving from east to west during the course of a day.
- Places that have the same longitude will be in the same time zone.
Map Legends

The legend is the key to unlocking the secrets of a map. Objects or colors in the legend represent something on the map.
Can you understand this legend?
Age Expectancy

Legend

- 75 and above
- 70–74
- 60–69
- 50–59
- Below 50
- No data
Legend Reading Activities

► What You Can Learn From A Map
  - What do Maps Show Activity
  - Road Map
  - Road Map Legend
  - Road Map of Salt Lake City Region
  - Map Worksheet
Additional Sources

► Atlas - World (Holt, Rinehart and Winston)
► Outline Map of US
► Map Packet Download
► Maps.com
► National Geographic Xpeditions
► Maps & Globes