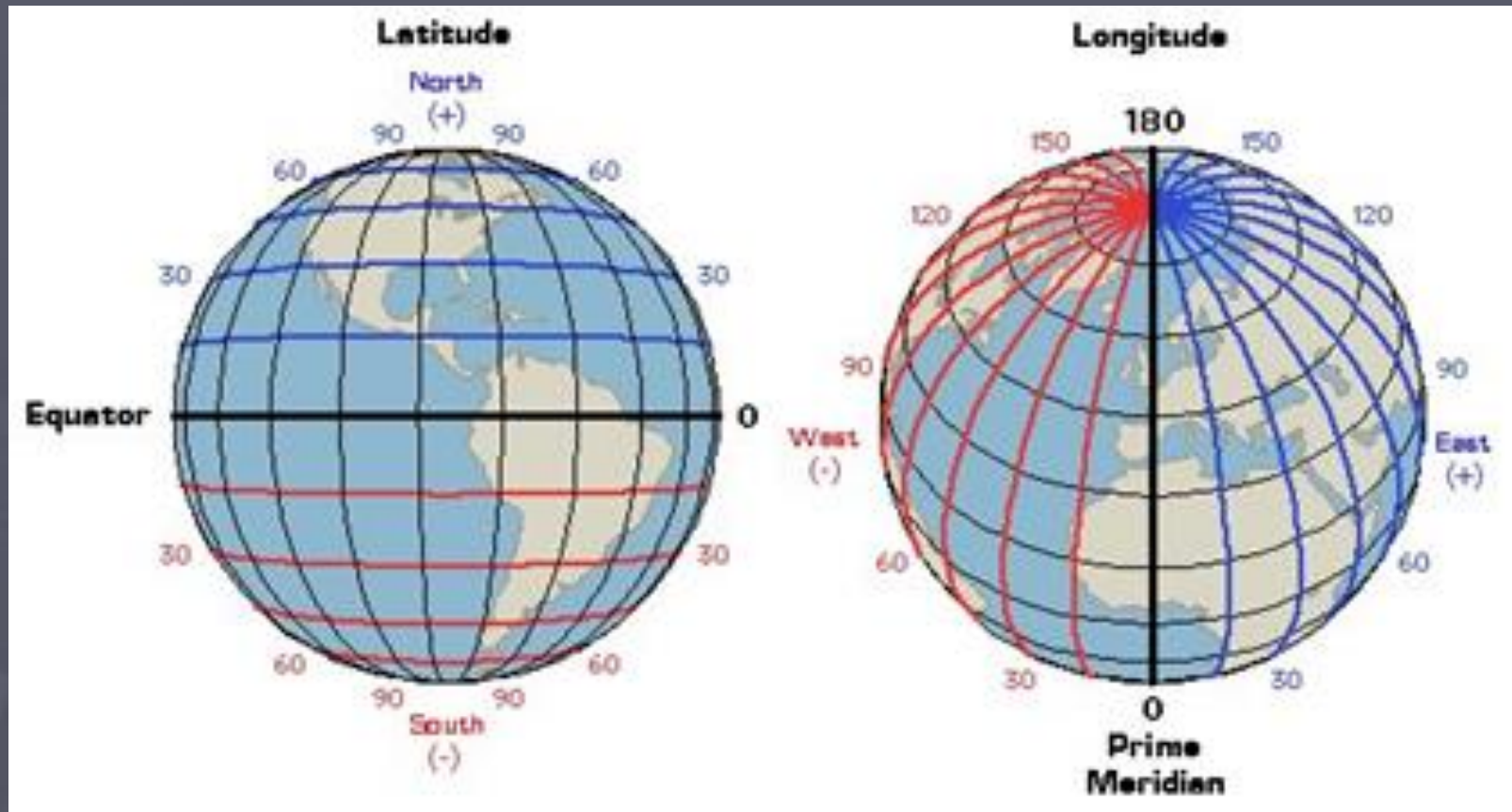


Latitude and Longitude



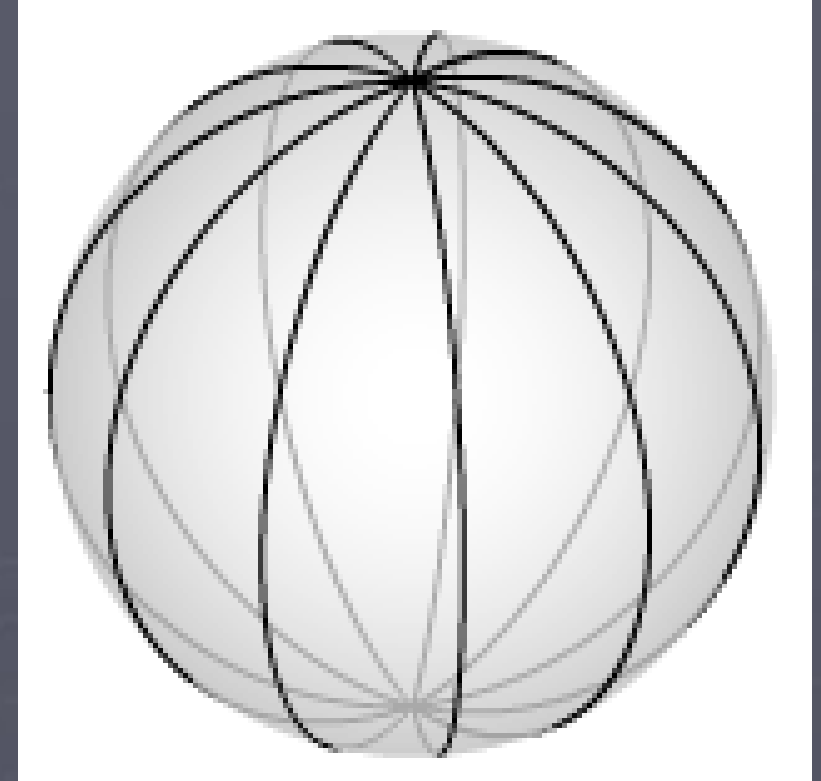
Latitude and Longitude

- The imaginary reference lines that run from North to South (Longitude) and East to West (Latitude) across the Earth.



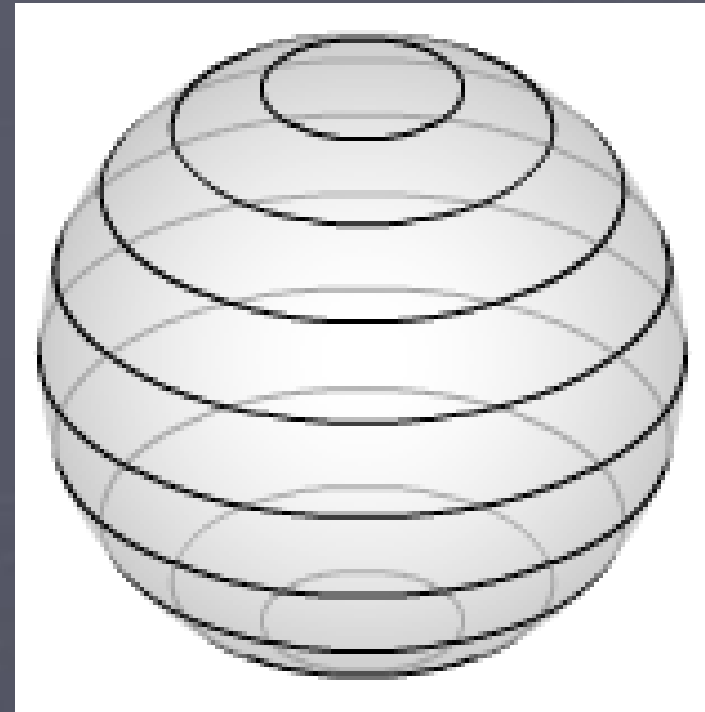
Measuring Longitude

- Longitude lines (also called meridians) connect the North Pole and the South Pole, but are measures East and West.
 - From 0° to 180° East and 180° West
 - 0° Longitude is Prime Meridian or Greenwich Line
 - Roughly 180° is International Date Line



Measuring Latitude

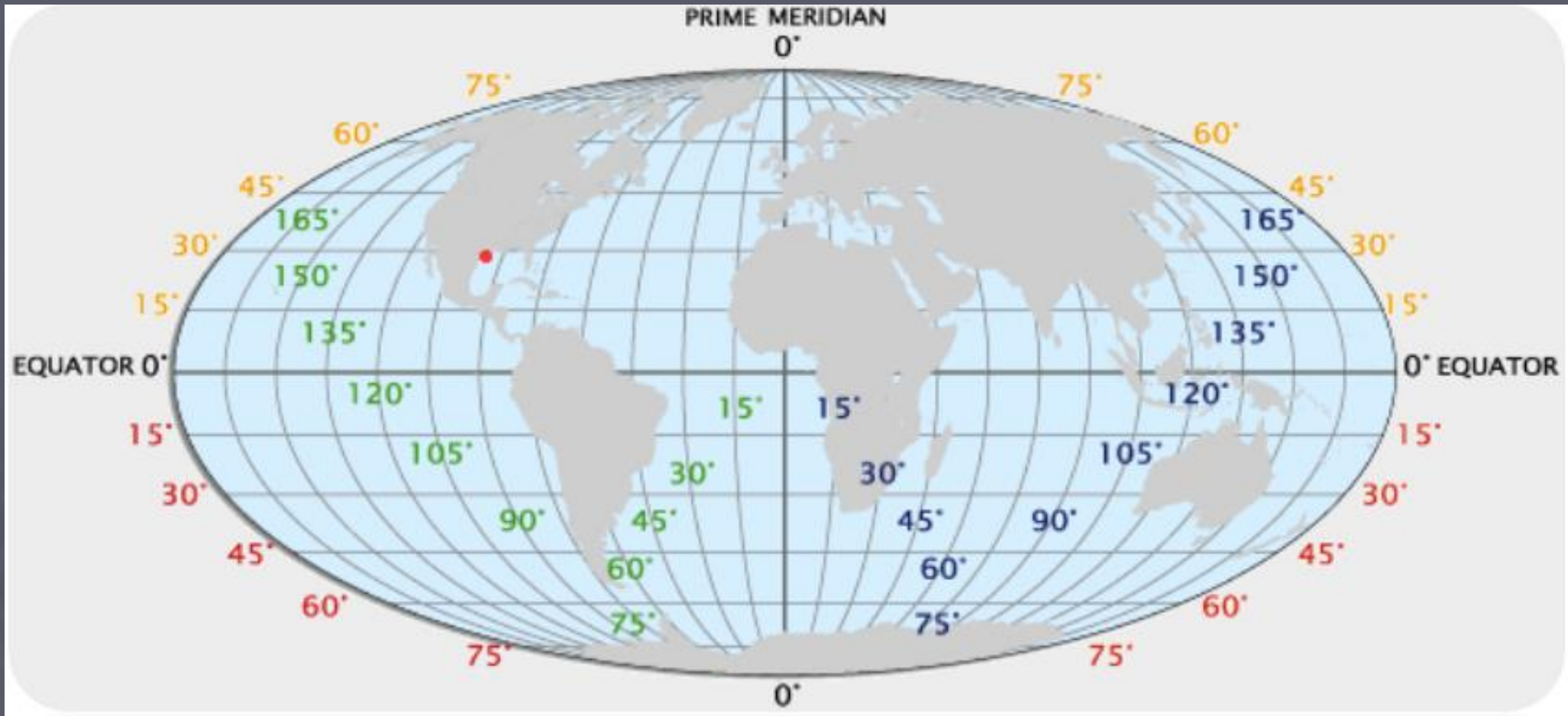
- Lines of Latitude (or Parallels) run horizontally around the earth but are measured North and South
- Each degree of Latitude is about 69miles (111km) measuring away from 0° Latitude (The Equator)



Major Latitude References

- The Equator is 0° Latitude
- The North Pole is at 90°N , while the South Pole is at 90°S
- The Tropic of Cancer is 23.5°N , and the Tropic of Capricorn is 23.5°S
- Arctic Circle is 66.33°N , and Antarctic Circle is 66.33°S

Lines of Latitude and Longitude



Coordinates

- Latitude and Longitude are written as a set of coordinates
 - Longitude is measured around the globe and is broken into 360°
 - Latitude reached from the Equator to the Poles and is broken into 180°
- Coordinates are divided into degrees, minutes, seconds, and sub-seconds
 - Example Eiffel Tower is at $48^\circ 51' 28.63''$ North, $2^\circ 17' 39.64''$ East