


The Earth's Structure

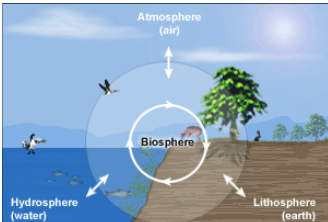
Tuesday 11/4



1

Earth's Structure

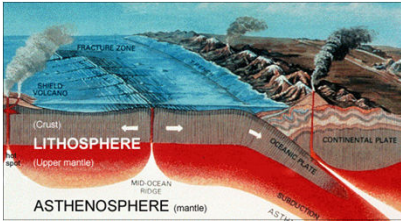
- The Earth has three major parts
 - Lithosphere (solid)
 - Hydrosphere (liquid water)
 - Atmosphere (gas)



2

The Lithosphere

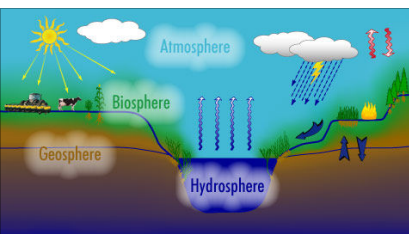
- The dense, solid shell of the earth composed of rock and soil that surrounds the more fluid inner layers



3

The Hydrosphere


- The waters of the Earth including the oceans, lakes, rivers, and water in the ground
- Water covers 70% of the Earth's surface



4

The Atmosphere

- The shell of gasses that surround the earth and is layered into zones
 - Troposphere** contains the gasses necessary for life
 - 78% nitrogen, 21% oxygen, 1% other gasses
 - Strong winds and storms along with most of the water vapor and clouds
 - Stratosphere
 - Mesosphere
 - Thermosphere

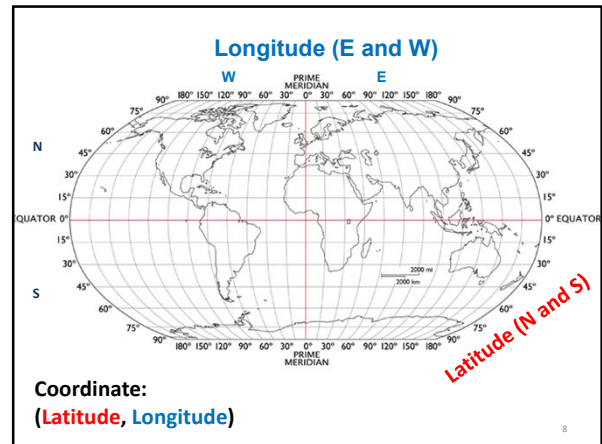
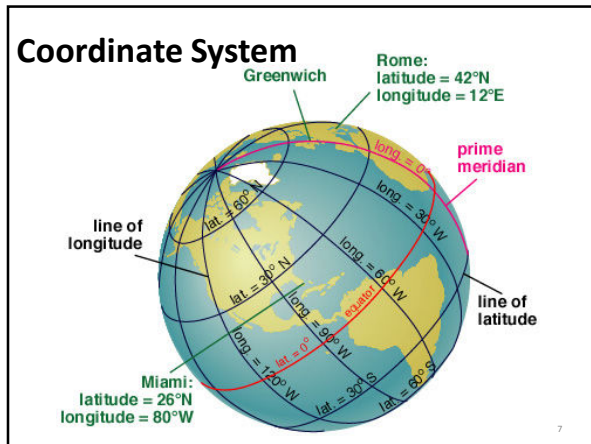


5

Locating Positions on Earth

- Coordinate System**
 - Scientists have established a surface grid (lines) that you can use to locate any position on Earth.
 - Each pair of coordinates (2 numbers) are called the latitude and longitude
 - Latitude** are distances in degrees north or south of the equator
 - The **Equator** is an imaginary line that circles the Earth halfway between the North Pole and the South Pole.
 - Longitude** are distances in degrees east or west of the prime meridian
 - The **Prime Meridian** is an imaginary line that runs through Greenwich, England, from the North Pole to the South Pole

6



Practice!

- Complete the "World Latitude and Longitude Activity"
- Turn in the activity into the clear tray by the end of the period for a class participation grade or finish tonight as additional homework.
- Raise your hand if you have any questions!

Helpful Textbook Pages: 33 - 35, Glossary

Today's Main Idea

The Coordinate System (Latitude N & S, Longitude E & W) is used to locate positions on the Earth.

Explore Question

2. Explore today's main idea with this question:
You are at 70° north latitude flying directly south, how many more degrees of latitude would be left to pass over to reach the south pole?

Vocabulary

- Contour Line
- Contour Interval
- Map Legend