

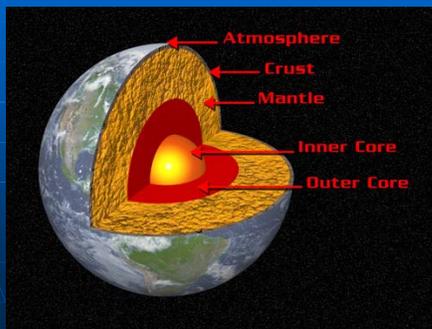
The Basics of Geography

Unit 1

Five Themes of Geography Review

- Location – Where is it?
- Place – What do you find there? What is it like
- Region – How are things similar or different?
- Interaction – How do people relate to the physical world?
- Movement – How do people, ideas, and products move from one location to another?

Inside the Earth



On the Earth's Surface

- 30% land, 70% water
 - Where do you find water?
 - Oceans
 - Lakes
 - Rivers
 - Glaciers
 - Salt water can not be used for drinking or farming.

On the Earth's Surface

- There are four oceans
 - Arctic Ocean
 - Atlantic Ocean
 - Indian Ocean
 - Pacific Ocean
- Some geographers now identify a 5th ocean, the Southern Ocean, as being the waters around Antarctic from 60° S latitude southward.

Oceans of the World

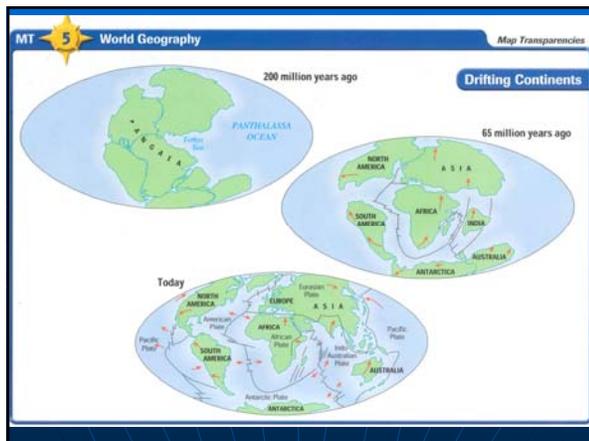


On the Earth's Surface

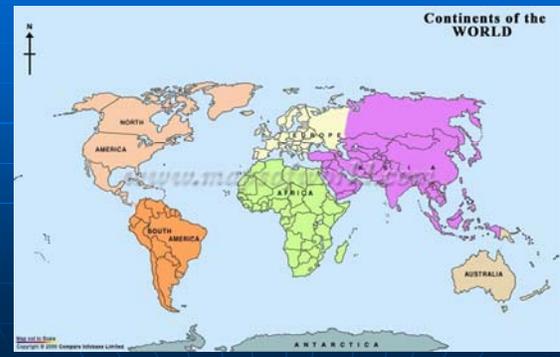
- There are 7 continents
 - Africa
 - Antarctica
 - Asia
 - Australia
 - Europe
 - North America
 - South America

Continental Drift Theory

- About 200,000,000 years ago, the earth had one super continent, Pangaea.
- Over millions of years, Pangaea divided into many plates and slowly drifted apart to their current positions today.



Continents of the World



On the Earth's Surface

- Water Cycle
 - Evaporation
 - Movement (carried by the wind)
 - Rain or snow
- Erosion helps to shape the surface of the earth.
 - Water and air make most of the changes.

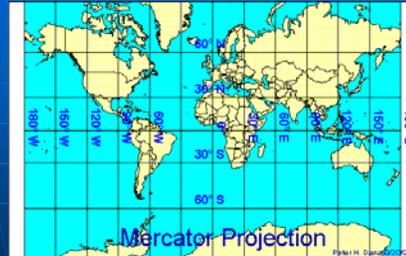
Landforms and Waterbodies



Map Projections

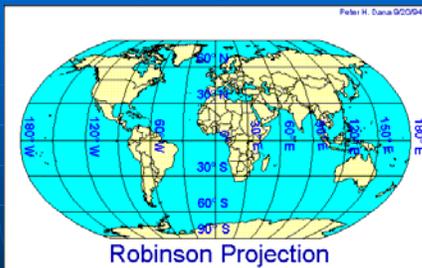
- All map projections have some type of distortion (makes the picture look funny or is not accurate) because they are two-dimensional.
 - Globes are the only exception since they are three dimensional.

Map Projections



- The Mercator projection shows the true shapes, but stretches the lines of latitude apart.

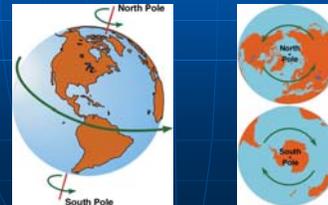
Map Projections



- Robinson projections are used in the textbook and have little distortion.

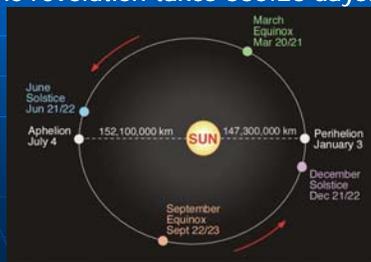
Rotation and Revolution

- Rotation
 - The earth rotates on its axis every 23 hours 56 minutes
 - The axis of the earth is tilted at 23.5°.



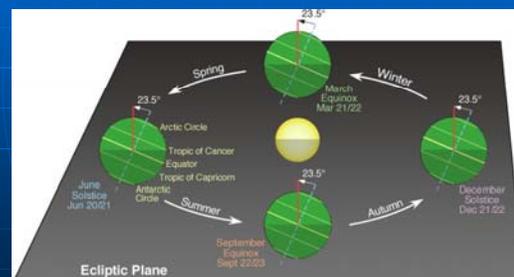
Rotation and Revolution

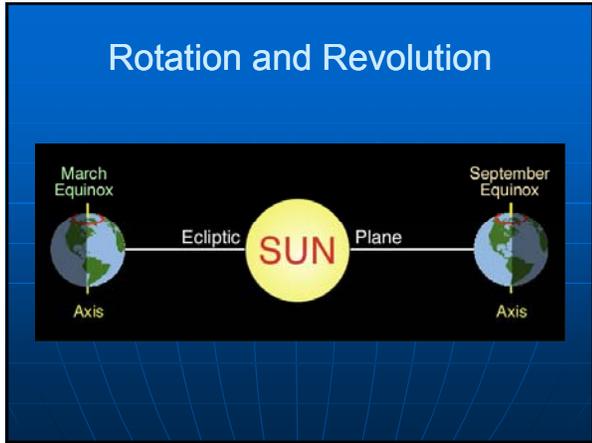
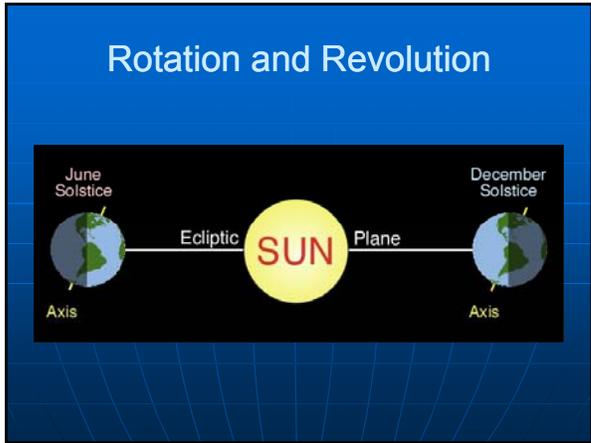
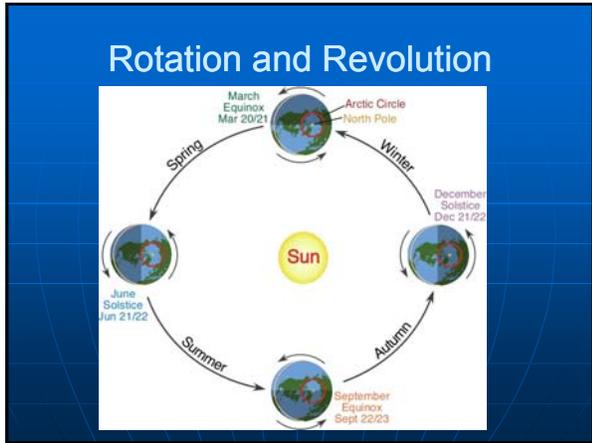
- Revolution
 - One revolution takes 365.26 days.



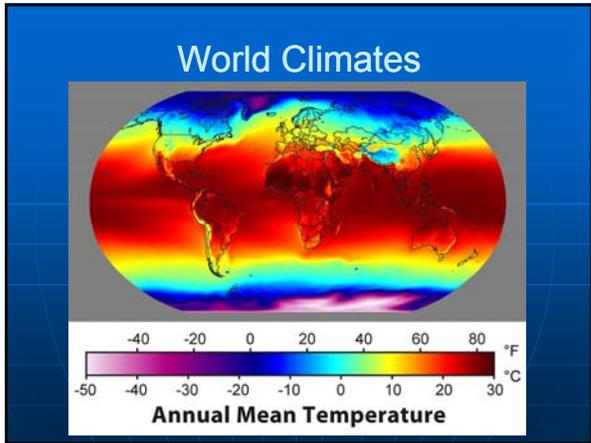
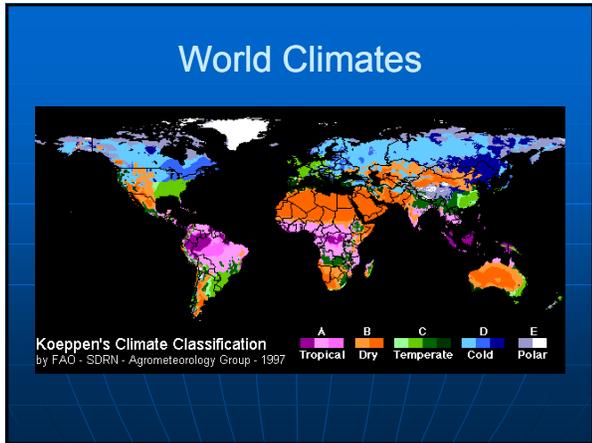
Rotation and Revolution

- The Seasons





- ### World Climates
- Weather around the world changes every day.
 - Climate is what you can expect the weather to do in the long run.
 - Climate is affected by three factors:
 - Latitude
 - Elevation
 - Ocean



Types of World Climates

- Tropical Wet
- Tropical Wet & Dry
- Semiarid
- Desert
- Mediterranean
- Marine West Coast
- Humid Subtropical
- Humid Continental
- Subarctic
- Tundra
- Ice cap
- Highlands

World Climates

- Question: What type of climate does Sacramento have?
 - Mediterranean
 - Dry, warm/hot summers and cool, rainy winters.

Weather

- Weather is the condition of the atmosphere at a particular location and time.

Weather

- There are several factors that affect weather:
 - Water vapor;
 - Cloud cover;
 - Landforms and bodies of water;
 - Elevation;
 - Air movement.
- Rain, snow, sunshine, clouds, and wind are common forms of weather.

Weather

- Weather extremes can include
 - Hurricanes and typhoons;
 - Tornadoes;
 - Blizzards
 - Droughts (long periods of time without rain or with a very small amount of rain);
 - Floods.

Tornado



Tornado



Tornado



Hurricane Katrina



Hurricane Isabel



Hurricane Katrina Eye-Wall



Mississippi River Flood



Mississippi River Flood



Confluence of Mississippi and Missouri Rivers, August 1993. Extensive floods in the Mississippi River Basin during the spring and summer of 1993 caused \$20 billion in damages. (Photograph, Srenco Photography, St. Louis, Mo.)