



# Looking at the Earth

## The Geographer's Tools

**ONLY WRITE**

**WHAT IS**

**UNDERLINED**

# The Geographer's Tools...

- Tools include maps, globes, and data that can be displayed in a variety of ways
- Globe: 3-dimensional representation of Earth
- Map: 2-dimensional representation of Earth



# Maps vs. Globes



What are the Pros and Cons of each?

# Maps vs. Globes: Pros and Cons

- Maps:

- Pros:

- Transportable (carry easily)
    - Can be drawn to any scale

- Cons:

- Doesn't show details
    - Can be distorted

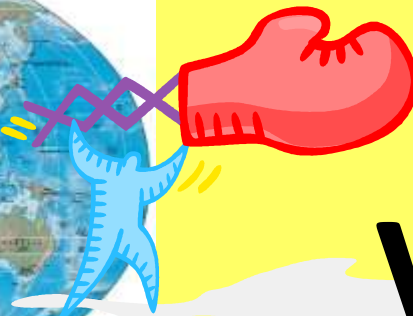
- Globes:

- Pros:

- Small model of Earth
    - Info. is where it should be

- Cons:

- Not Transportable
    - Can only see ½ of Earth at a time



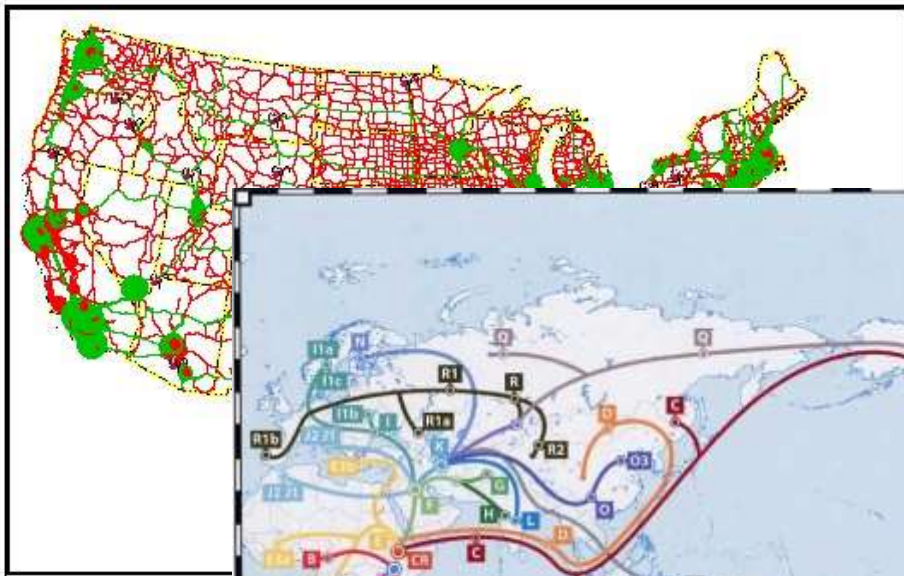
**VS.**



T

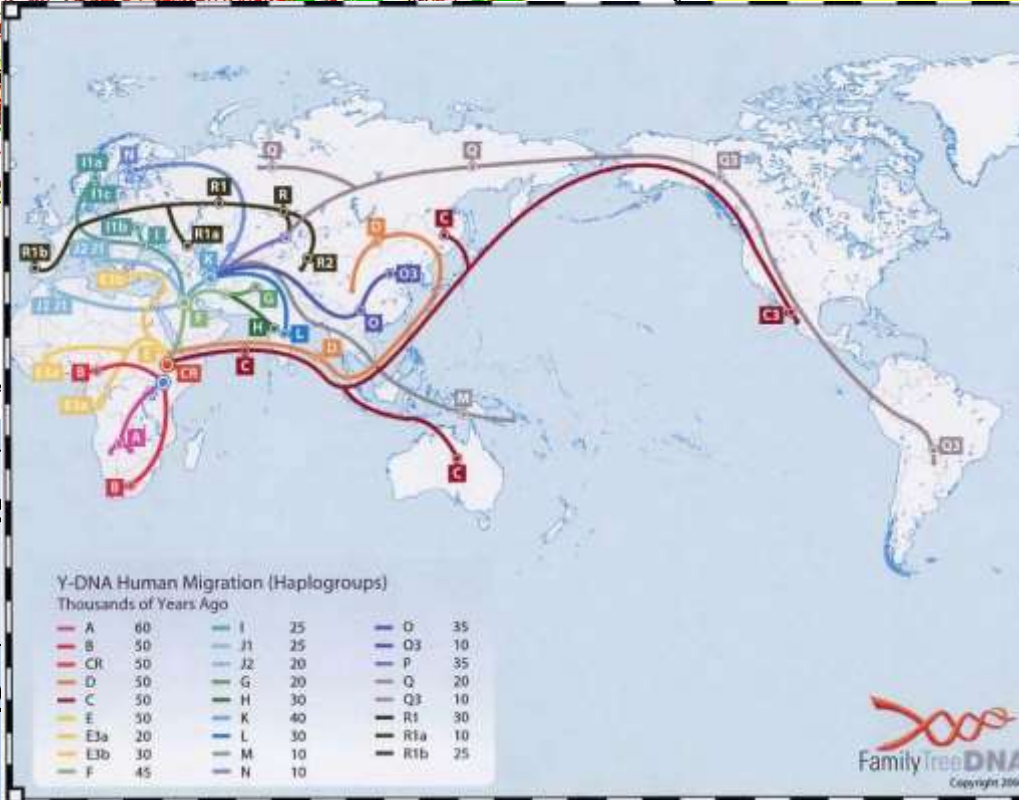
### Political Map

Shows boundaries of countries, and labels major cities



physical features such as rivers, mountains, deserts, etc.

symbols, dots, or lines to help see patterns related to a specific idea.



The size of each country is drawn in proportion to the data is usually shown with arrows.



© 2005 World & National Geographic Society

BLATT PERHUIS

# Types of Maps

## Physical Maps -

Shows landforms and physical features such as rivers, mountains, deserts, etc.

## Qualitative Maps -

Uses colors, symbols, dots, or lines to help you see patterns related to a specific idea.

## Cartograms -

Geographers present information about a country based on a set of data other than land area.

The size of each country is drawn in proportion to the data

## Flow-line maps -

Illustrate movement of people, goods, ideas, animals, or even glaciers → information is usually shown in a series of arrows.

**A  
Living  
Planet:  
The Earth  
Inside  
and Out**

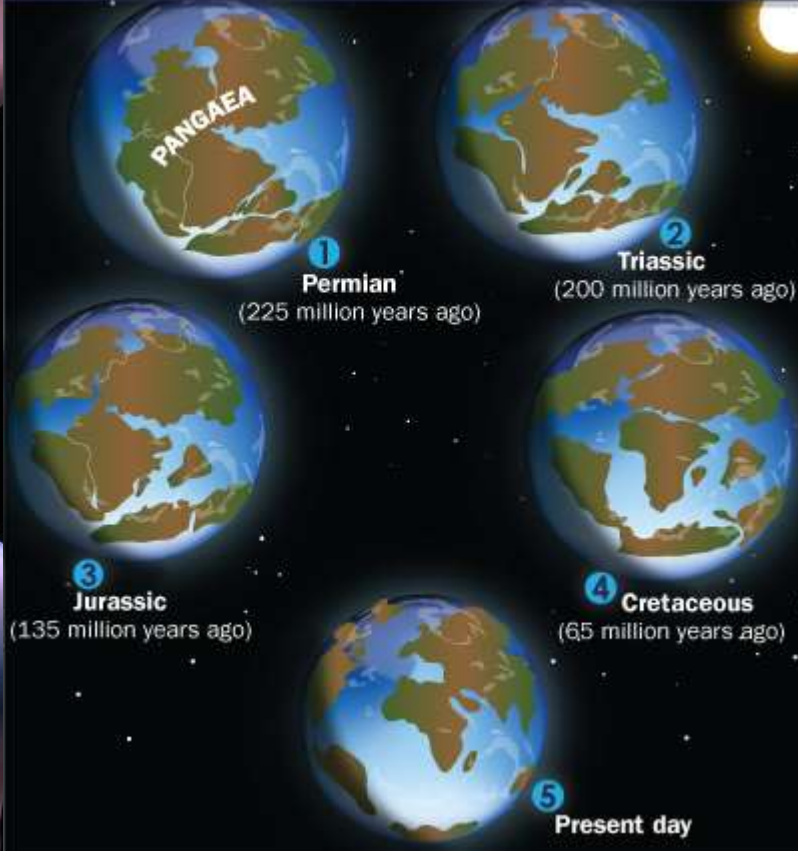






## The Breakup of Pangaea

©2008 HowStuffWorks



# The Solar System

- The “home address” of earth is the third planet in the solar system of the sun.
- 93 million miles away from the sun...that’s faaaaaarrrrrr!!!!



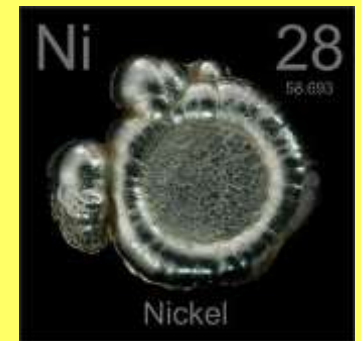
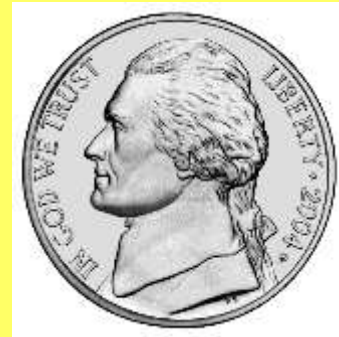
# The Structure of the Earth

- Inside:

- The core is the center of the earth and is made up of iron and nickel.



&



Surrounding the core you have the...

- Mantle: surrounds the core, most of earth's mass
- Magma: molten rock which forms in the mantle and rises through the crust
- Crust: thin layer of rock at the earth's surface

# The Structure of the Earth

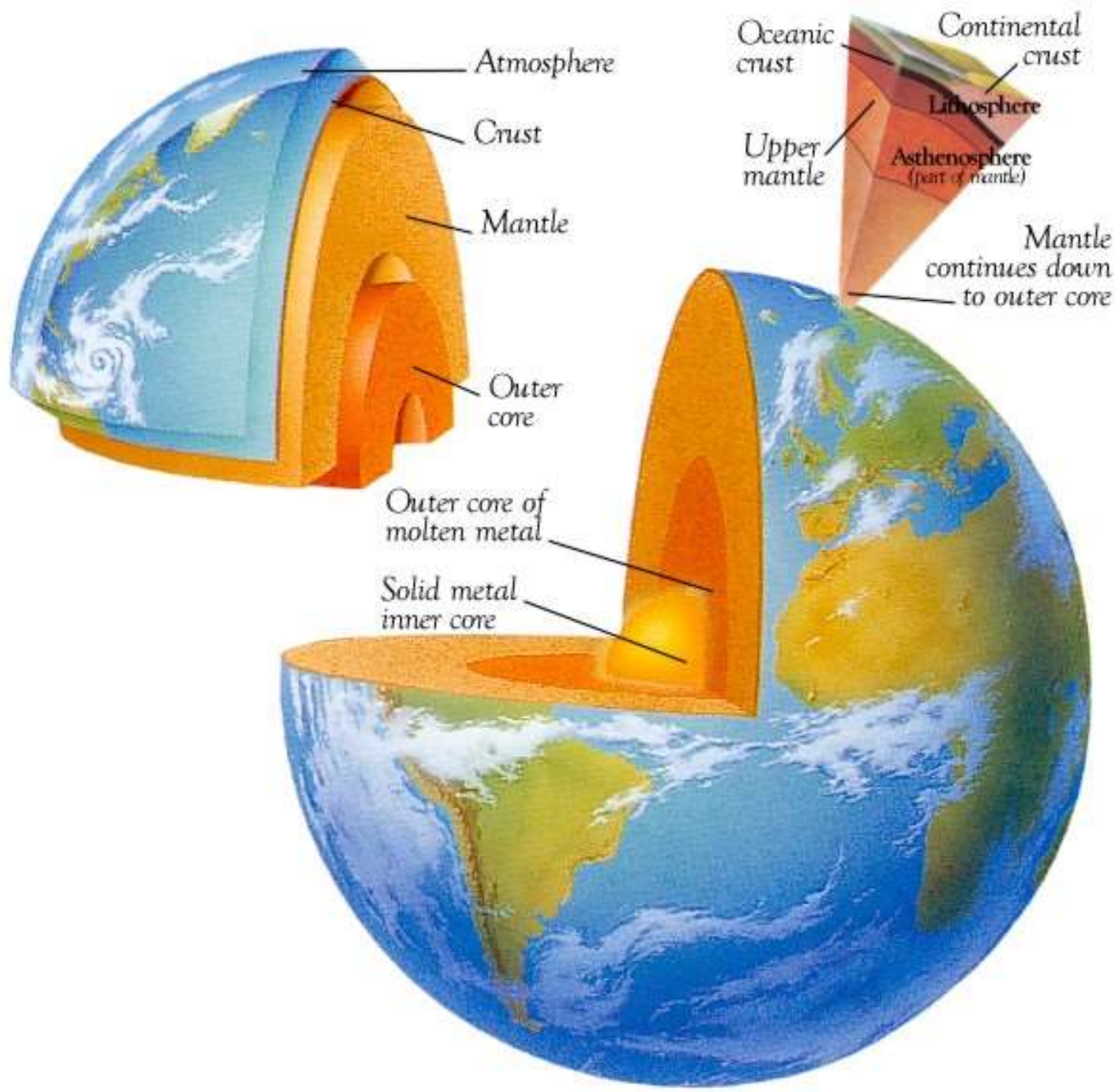


- On and Above:

- Atmosphere: layer of GASES surrounding the earth, contains oxygen
- Lithosphere: SOLID SURFACE of the earth, includes crust and uppermost mantle, as well as the seafloor and continents (What are the 7 continents?)
- Hydrosphere: WATER ELEMENTS on earth

All of these spheres form the BIOSPHERE, which is where plants and animals live.







# Bodies of Water and Landforms

Chp. 2 Section 2

# Main ideas...

- Water covers about  $\frac{3}{4}$ 's of the earth's surface
- The earth's surface displays a variety of landforms

**PLACE** Iguazu Falls at the Argentina-Brazil border has 275 separate waterfalls varying between 200 and 269 feet high. It is nearly three times wider than Niagara Falls in North America.





- Without saltwater and freshwater, life on this planet would be impossible. Why?



- Oceans and Seas

- Ocean: interconnected body of salt water, covers 71% of planet

- Name the 4 oceans...

Which do you think is the largest?

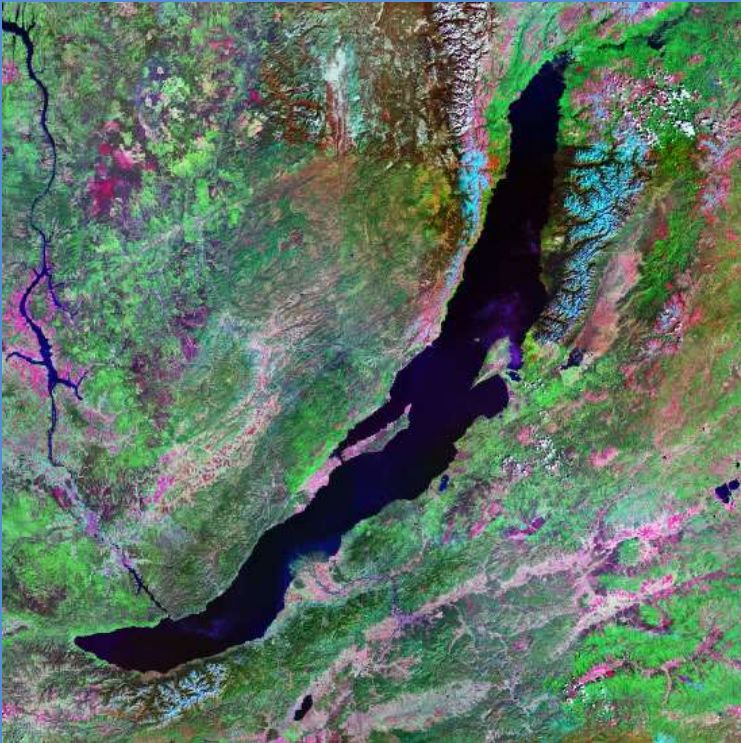
**PACIFIC OCEAN!**



# Lakes, Rivers, Streams

- Lakes
  - Lakes hold 95% of earth's freshwater supply

Largest freshwater lake  
is Lake Baikal in Russia



Largest saltwater lake  
is the Caspian Sea in Western Asia



# Longest River

## The Nile



# Most Water

## The Amazon



# Continental Landforms

- Types of landform are on page 34-35 in your book, open to it!



- Topography: combination of the surface shape and composition of the landforms and their distribution in a region.
  - A Topographic map shows a landform's vertical dimensions



PEARSON  
Prentice  
Hall

### Topographic Maps

**Build a Landscape** [A] [A]

To represent elevation, relief, and slope on topographic maps, mapmakers use contour lines. On a topographic map, a contour line connects points of equal elevation. A variety of

**3-D View**

A 3-D perspective view of a mountain range, showing the terrain's elevation and relief in shades of green and brown.

**Topographic View**

A topographic map of a mountain range, showing contour lines and elevation values such as 3000, 3500, 4000, 4500, and 5000.

Raise Lower

+ -

Random Overlay

Zoom Move Rotate

Top View

# Oceanic Landforms

- The earth's surface from the edge of a continent to the deep part of the ocean is called the continental shelf.
- The ocean floor has ridges, valleys, canyons, and plains ...just like above the ocean!

