**The Hydrosphere**

**The Properties of Water**

**Water Distribution on Earth**

* Ocean-
* Other Saline Water-
* Freshwater-
* Glaciers/Ice caps-
* Ground water-
* Surface & atmospheric water-
  + Lakes-

After learning the percentages above, what questions do you have regarding our freshwater on the planet?

**Water Availability per Capita**

What do you notice about the countries that are considered water rich?

What do you notice about the countries that are considered water poor?

Ponder how some of the water poor countries get their freshwater?

**The Water Cycle (pg. 375-377)**

Definition:

* Precipitation:
* Condensation:
* Evaporation:
* Transpiration:
* Evapotranspiration:

What is the “water budget” referring to?

Is the water budget in particular areas always balanced? Why or why not?

**Atmospheric Water**

Contains how much of world’s water supply?

How is the atmosphere the most important resource for distributing water?

How does water affect global warming?

Draw a picture to help explain the question above.

**Ocean Circulation**

What are the two primary components to ocean circulation?

What circulates each component?

Density:

Density current:

* Determined by:

Thermohaline circulation results in a global conveyor belt with water sinking in some places and rising in others.

* How does salt affect the density of water?
* How does water temperature affect the density of water?
* Thus the densest water will be…

**Connection:** How can global warming affect the ocean currents?

**Lake Cycles**

How does the cycle of a freshwater lake work?

How do fish breathe?

Oligotrophic Bodies of Water

Eutrophic Bodies of Water

How can we cause eutrophication of water?

What are the effects of the eutrophication of water?