

Hydrosphere...

Where in the world is our water?

Hydrosphere...

- Hydrosphere=All of the water on or near the Earth's surface.
 - Oceans/lakes/rivers/Polar icecaps
 - Atmosphere/Clouds
 - Land/Soil/Wetlands/Rock layers beneath Earth's surface

How does water move within the Hydrosphere?

- The Water Cycle
 - Evaporation=liquid water is heated by the sun and rises into the atmosphere as water vapor.
 - Condensation=Water vapor forms water droplets on dust particles. Water droplets form clouds.
 - Precipitation=Droplets become heavy and fall in the form of snow, sleet, or hail.

Four Oceans...

- Pacific (biggest and deepest)
- Atlantic (second biggest)
- Indian (third biggest)
- Arctic (smallest and covered mostly with floating ice called pack ice)

Ocean Water Characteristics...

- Salinity=concentration of dissolved salt, usually sodium chloride
- Temperature zones
 - Surface=top layer of ocean and warmest because heated by the sun(up to 350m deep)
 - Thermocline=Temperature falls fast with depth(300-700m deep)
 - Deep Zone=Coldest layer near the bottom

Fresh Water

- 2 ways to desalt water...
 - Distillation
 - Reverse Osmosis
- 3% Fresh Water
 - 22% Most in icecaps and glaciers
 - Lakes/Rivers
 - <1% Groundwater...where most of our drinking water comes from (soils and wetlands)

6 Major Watersheds in PA...

- Delaware Basin
- Erie Basin
- Genesee Basin
- Ohio Basin
- Potomac Basin
- Susquehanna/Chesapeake Basin
- 104 subdivided watersheds
- All watersheds separated by elevated areas called divides
- The Continental Divide separates the east/west bodies of water

Drainage Patterns...

- Drainage Patterns are the visual sequences in which one body of water drains into another.
- Dendritic=looks like the branches of a tree
- Radial=looks like the spokes of a tire
- Rectangular=makes right angles
- Trellis=runs parallel

Other freshwater terms...

- Tributaries=smaller streams/rivers that flow into larger streams/rivers
- Aquifer=A rock layer that stores and allows the flow of groundwater.
- Recharge Zone=The surface of the land where water enters an aquifer.

Your Assignment...

- Make sure your watershed map and hydrosphere worksheet are completed.
- Add the atmosphere and hydrosphere to your rap/song.
- Begin reviewing for your Unit II test, which will take place the end of next week.
- Bring in a current event if you haven't already.
- Atmosphere Quiz next class