Soil Characteristics Vocabulary:

•**Humus:** Decayed plant or animal matter.
•**Topsoil:** Top layer of soil.
•**Subsoil:** Layer of soil underneath topsoil.
•**Parent material:** Material from which soil is formed.
•**Particle size:** Includes sand (2.0-.06 mm), silt (.06-.002 mm) or clay (less than .002 mm).
•**Porosity:** How much space is between particles of soil. Spaces are filled with air, water or gases. How do you think porosity affects groundwater?
•**Permeability:** How fast water flows through soil. How would permeability be important if you wanted to build a small pond?

Salt vs Fresh Water:

•**Composition:** Saltwater is made by rocks that have been eroded and become part of a "salty" solution.
•**Density:** Saltwater is more dense than fresh water. For this reason, objects which cannot float in freshwater can float in seawater.
•**Electrical Conductivity:** Electricity flows more easily through saltwater. Electricity flows through water by means of small particles called "ions." Salt is made up of NA and Cl ions.
•**Viscosity:** Viscosity refers to the resistance provided by water. Saltwater has a higher viscosity due to its salt content. A swimmer can swim faster in fresh water than saltwater.

Water Systems:

•**Wetland Systems:** Areas saturated with water. Often found along waterways and in floodplains. Includes swamps, marshes and bogs.
•**Ocean Systems:** Covers 70% of earth's surface and contains 97% of earth's water. Oceans moderate climate all over the earth.
•**River Systems:** River's source and river as it forms a V-shaped valley, a floodplain, meanders and flows into the river's mouth (e.g. Susquehanna River flows into Chesapeake Bay).
•**Watershed:** Area drained by a river and its tributaries.
•**Tributaries:** Smaller bodies of water flow into larger waterways.
•**Water quality:** Water quality is the chemical, physical and biological content of water. The water quality of rivers and lakes changes with the seasons and geographic areas.