*Key Vocabulary – ES8: Water and Geologic & Human Impact on Water*

**Soil** – Loose rock fragments and clay mixed with organic material.

**Karst Topography** – Areas with caves and sinkholes caused by the slow dissolving of the rock by slightly acidic ground water. Only carbonate rocks dissolve like this. The Valley & Ridge province has karst topography.

**Carbonate Rock** – Rock that has minerals with carbon and oxygen as part of its chemical formula. Carbonate rocks dissolve in acid. Limestone and dolomite are carbonate rocks.

**Solubility** – The ability to become dissolved. Carbonate rocks are soluble in acid.

**Sinkhole** – A hole or depression in the ground caused by the ground collapsing underneath. Sinkholes are often caused when caves (caverns) collapse.

**Permeability** – A measure of how easily water or other liquids can move through the rock or sediment.

**Impermeable** – Sediments or rock that do not let water or other liquids move through it. Clay is impermeable sediment. Slate is an example of an impermeable rock.

**Permeable** – Sediments or rock that let water or other liquids pass through it. Permeable rocks and sediments can hold a lot of water.

**Groundwater** – Water that is held in the ground within the tiny spaces in permeable rock or sediment.

**Zone of Aeration** – A layer or layers of sediment and/or rock that is permeable but holding air in its spaces instead of water. The zone of aeration sits above the zone of saturation.

**Zone of Saturation** – A layer or layers of sediment and/or rock that is permeable and holding water in its spaces. The zone of saturation sits below the zone of aeration.

**Water Table** – The top of the zone of saturation. The water table goes up as water is added and down as water is removed.

**Aquifer** – An area of permeable rock or sediment that can contain groundwater and allow groundwater to flow through it. Drinking wells are placed in aquifers.

**Finite** – A limited amount or something. If something is finite, you could run out of it. Fresh water is finite.

**Hydrologic Cycle** – The way in which water is naturally changes its location from the atmosphere to the surface and under ground, into streams, lakes, and oceans, and back into the atmosphere

**Evaporation** – Changing state from a liquid into a gas.

**Water Vapor** – Water in a gas state. Water vapor in the atmosphere is invisible and causes humidity.

**Condensation** – Changing state from a gas to a liquid. Clouds are condensed water droplets in the atmosphere.

**Precipitation** – When rain, snow, sleet, or hail falls to the ground

**Runoff** – When water from precipitation runs across the surface of earth instead of soaking into the ground. Erosion is caused by runoff.

**Watershed** – An area within which all water flows to a common location. Ridges separate watersheds. The lower end of watersheds may join up into a larger watershed.

**Uplift** – When tectonic activity lifts a rock up to the surface, exposing it to weathering.

**Weathering** – The breaking down of rock into rock fragments when exposed to the weather or other processes.

**Chemical Weathering** – The breakdown of rock through chemical processes such as acidic groundwater.

**Physical Weathering** – The physical breakdown of rock into smaller rock fragments. Ice wedging is an example of physical weathering.

**Terrain** – An area of land with a certain physical and/or chemical features.

**Salt-Water Intrusion** – When saltwater gets into a freshwater aquifer. In the Chesapeake Bay, a meteorite hit and broke the ground, letting saltwater into the groundwater.