

ODS SOILS UNIT:

**LIST OF ESSENTIAL VOCABULARY:**

**Soil Introduction and Formation:**

**Bedrock:** A solid layer of rock beneath some soils.

**\*Decompose:** To rot or break down.

**Duff:** Duff is made up of leaf litter and other organic materials lying on the surface of the soil.

**\*Ecosystem:** An interacting natural environment which includes all the animal and plant life that is found.

**\*Inorganic:** Materials such as minerals that are not products of organic life.

**\*Nutrients:** Ingredients that provide food for growth or development.

**\*Organic:** Materials that contain carbon compounds. Most living things contain carbon compounds.

**Parent material:** Any material from which soil is formed.

**Soil Profile:** A cross-section that lets you see the different layers of soil.

**Subsoil:** The layer of soil in a soil profile that is below the topsoil.

**Topsoil:** The fertile layer of soil below the duff layer, and above the subsoil. The fertile layer that has organic matter incorporated within it and contains many nutrients.

**Topography:** The slope of the land which can be one of the things that determines the type of soil that is formed.

**\*Weathering:** The breaking down and wearing away of the Earth and rocks.

**Physical Weathering:** The process in which large rocks are broken down into smaller pieces of the same material.

**Chemical Weathering:** A process that changes rock material into another substance.

### Soil Texture and Absorption:

\***Absorption:** The ability of soil to let water soak in.

\***Clay:** A very small flat (platy) shaped particle which can be part of the soil. It has the ability to tightly hold water and tends to feel slick and can hold its shape when molded.

\***Compacted:** Soil that does not have pore space to absorb water very well.

\***Erosion:** The weathering and transportation of soil by wind, water, gravity, or human impact.

\***Loam:** A soil mixture of sand, silt and clay.

\***Pore space:** An empty space between soil particles that can be filled by water and air.

\***Sand:** Soil particles made of ground minerals and rock that are rounded or irregular between 0.05 and 2mm in diameter.

\***Silt:** Soil particles that are irregular fragments that are different in shape and seldom smooth or flat. Particles are between 0.002 and 0.05mm in diameter.

\***Texture:** The “feel” of the soil. The amount of sand, silt and clay particles that comprise the soil.

### Soil pH:

**Acid:** A substance with a pH from 0 to 7.

**Alkaline (or Basic):** A substance with a pH from 7 to 14.

**Neutral:** A substance with a pH of 7.

**pH:** The measurement of acidity or alkalinity in a substance.

### **Soil Biology:**

**Habitat:** A place where an organism lives. It provides the organism food, water and shelter.

**Food Chain:** The transfer of food energy from the source in plants through a series of animals who eat and then are eaten.

**Food web:** The combination of all of the overlapping food chains in an ecosystem.

\*If time is limited, focus on starred vocabulary prior to attending Outdoor School.