

Name: \_\_\_\_\_  
G2 (lessons 3-4) Summative

Summative date: \_\_\_\_\_

### Vocabulary:

1. **Soil** – a loose mixture of rock fragments, organic material, water, and air that can support the growth of vegetation
2. **Parent Rock** – a rock formation that is the source of soil
3. **Bedrock** – the layer of rock beneath soil
4. **Soil Texture** – the soil quality that is based on the proportions of soil particles
5. **Soil Structure** – the arrangement of soil
6. **Humus** – the dark, organic material formed in soil from the decayed remains of plants and animals
7. **Leaching** – the removal of substances that can be dissolved from rock, ore, or layers of soil due to the passing of water
8. **Soil Conservation** – a method to maintain the fertility of the soil by protecting the soil from erosion and nutrient loss
9. **Erosion** - the process by which wind, water, ice, or gravity transport soil and sediment from one location to another

### Things to Know:

1. Know pH scale: Scale is 0 – 14 with 7 being neutral. Everything less than 7 is acidic and higher than 7 is basic.
2. The temperate forest and grassland is the climate that has the most productive soil for raising crops.
3. The two reasons soil in tropical rain forests is nutrient poor are heavy rains leach nutrients from the topsoil and lush vegetation quickly takes up the remaining nutrients.
4. Arctic climates have so little humus in the soil because the low (cold) temperatures slow down or stop the decaying of plants and animals. This limits the amount of humus in the soil, which is what provides the nutrients.
5. Soil provides nutrients for plants, allows for water storage for plants, and provides a habitat for animals.
6. Transported soil is blown or washed away from its parent rock, while residual soil remains near the parent rock.
7. Desertification (land degradation) is the process of land becoming a desert because there are no plants to help hold soil and cycle water.
8. **Contour plowing** is when you plow across the slope of hills. **Terracing** is when one steep field is changed into a series of smaller, flatter fields. **No-till farming** is when old stalks provide cover from rain in order to reduce water runoff and soil erosion. **Crop rotation** is when a farmer plants different crops in order to use less nutrients or different nutrients from the soil.
9. George Washington Carver encouraged farmers to use cover crops as a conservation technique with plants such as soy beans and peanuts.
10. Deforestation leads to erosion because roots from the plants and trees in a forest serve as an anchor for soil. When forests are cut down, this anchor is removed and the soil is left exposed and unprotected. Wind, water, and gravity can then reach the unanchored soil and transport the sediment, causing erosion.