Name: \_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_Chapter 2 Test Study Guide **ANSWERS**

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| **Lesson 1** | |
| 1. What is mechanical weathering? 2. Give an example. | 1. Physical processes naturally break down rocks into smaller pieces. 2. Forest fires, ice wedging, abrasion, plants, animals |
| 1. What is chemical weathering? 2. Give an example. | 1. Changes a material that are part of a rock into new materials. 2. Water, acid rain, oxidation |
| 1. Chemical weathering is more rapid in what type of climate? | 5. Warm, wet climates |
| 1. What causes abrasion? | 6. glaciers, rock fragments tumbling in a stream, wind and waves |
| 7. Why does weathering have a greater effect on soil with clay particles vs. soil with sand particles? | 7. Clay particles are smaller than sand. Clay particles have more surface area than sand. |
| 8. What is oxidation?  9. What is a positive result of oxidation? | 8. Chemical weathering – combines elements of oxygen and other elements/molecules. (iron)  9. rust |
| 10. What type of weathering occurs more rapidly in warm, moist climates? | 10. chemical weathering |
| **Lesson 2** | |
| 11. Define decomposition | 11. Once living material is broken down into dark colored organic material. |
| 12. Explain what parent material is. | 12. The starting material of soil. |
| 13. As rain fills the cracks and pores of the parent material, what will be the outcome? | 13. Soil will begin to form. |
| 14. Give two examples of biota.  15. How does biota effect soil formation? | 14. Worms, bacteria, moles..etc. (living organisms in soil)  15. Bacteria aides in decomposition, worms dig holes for water to travel thorugh…. |
| 16. What are the layers in soil referred to? | 16. Soil Horizons |
| 17. What are the names of the soil horizons, and what are the characteristics of the horizons? | O-Horizon = very top organic layer  A- Horizon = topsoil, dark, organic matter, plant roots  B-Horizon = clay and other materials carried down pores/cracks from the A-horizon  C-Horizon = weathered parent material, solid rock or sediments  R-Horizon = bedrock |
| Write a description for each soil property:  Texture- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Structure- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Consistency- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Infiltration- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Fertility- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Soil moisture- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  pH- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Texture-ranges in size (boulder 🡪 very fine clay  Structure- shape of soil clumps/how they are held together  Consistency- hardness/softness of the soil  Infiltration- how fast water enters the soil  Fertility- the ability of the soil to support plant growth  Soil moisture- the amount of water in the soil pores  pH- acidity of the soil |