**Name:**

**Date:**

**School:**

**Facilitator:**

6.02 Soil Formation

**Part One Directions: Complete the chart below by identifying each example as physical weathering, chemical weathering, or biological weathering. Place an X in the appropriate box for each example. Mark all boxes that apply; some of the examples may be more than one type of weathering.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Example of Weathering** | **Physical Weathering** | **Chemical Weathering** | **Biological Weathering** |
| 1. Frost entering the crack of a rock and expanding |  |  |  |
| 2. Minerals in a rock reacting with oxygen |  |  |  |
| 3. Plant roots growing down in the soil putting pressure on bedrock |  |  |  |
| 4. Temperatures fluctuating between hot and cold extremes |  |  |  |
| 5. Worms digging through the ground |  |  |  |
| 6. Lichen releasing substances to breakdown rock |  |  |  |
| 7. Water running over the exposed surface of a rock |  |  |  |
| 8. Minerals in a rock reacting with water to help breakdown rock |  |  |  |
| 9. Salt left in rocks by water putting pressure on the rocks from the inside |  |  |  |
| 10. Sand in wind breaking down the surface of exposed rock |  |  |  |

**Part Two Directions: Answer the questions below.**

1. What is the major determining factor in soil formation? Define this factor and explain how it influences soil formation.
2. From the chart above, which example is an example of oxidation?
3. What is topography and how does it affect soil formation and soil characteristics?
4. Briefly explain how plants/plant roots contribute to soil formation and makeup.
5. List the 5 factors that influence soil formation.