**Unit 4 Study Guide**

**Section 1: Weathering**

1. What are the 2 types of weathering and how are they different?
2. What is frost wedging? What type of weathering is this?
3. Give examples of mechanical weathering
4. What are the 4 natural compounds that can do chemical weathering?
5. How does temperature affect weathering?
6. What is the result of weathering by oxygen?
7. What is the result of weathering by carbon dioxide?
8. What substances cause acid rain?
9. How does latitude (location N or S on the planet) affect weathering?
10. How does surface area affect weathering?
11. How does topography (slope) affect weathering?

**Section 2: Groundwater**

1. Most drinkable fresh water comes from….
2. How is it possible for water to be stored under ground
3. What is soil porosity?
4. What is the water table?
5. How does a well work?
6. What is an aquifer?
7. How does an artesian well work?
8. Explain what the water table has to do with springs.
9. How does a geyser work?
10. What would an area with karst topography look like?
11. What type of rock are caves commonly made in?

**Section 3: Soil**

1. How does a rock become soil? (Give the stages)
2. What are the 4 soil horizons and what is in each layer?
3. What are the 5 factors that influence soil formation?
4. Which of these 5 factors is the most significant?
5. What is transported soil?
6. What is the difference between sand, silt, and clay according to the texture triangle?
7. How do you use the soil texture triangle?
8. Why are different soils different colors?

**Section 4: Erosion**

1. How is erosion different from weathering?
2. What is deposition?
3. What is the difference between erosion by wind and erosion by water?
4. Water cannot do erosion without the force of \_\_\_\_\_\_.
5. Canyons and gorges are examples of erosion by…
6. Describe how stream erosion works:
7. What is a meander?
8. How does water flow in a meander?
9. Where is sediment deposited in a meander?