Worksheet: Weathering and Erosion Name: _____

Use sentences for those questions marked with an asterisk*.

1. Look at Figure 1 on page 126. Where did the pieces of rock near the bottom of the photo come from?

2. *Look at Figure 3. Explain how water caused this rock to break apart.

3. List the three processes that cause mechanical weathering.

_____ _____

_____

4. Which of the three processes listed in your answer to number 3 is involved with each of the following?

   a. Figure 4 on page 128: _____

   b. Figure 5 on page 128: _____

5. *Look at Figure 4. The photo shows granite peeling off of Half Dome. Explain why this "exfoliation" it is happening.

6. *Explain the difference between chemical weathering and mechanical weathering.

7. *How does water promote chemical weathering? (2 steps)

8. *Mechanical weathering breaks rock into smaller pieces. Why does this speed up chemical weathering? (See Figure 2.)

9. List the 4 major components of soil and give their percentages. (p. 133)

_____ _____

_____ _____

10. *Read 135 and look at Figure 12. The text says, "residual soil develops on bedrock". Explain what that means without using any of the underlined words.

11. *Why are "transported soils" called "**transported** soils"?

12. Look at figure 12 on page 135. The soil in this river valley is a transported soil that formed on "unconsolidated deposits" (gravel, sand, silt, clay). How did these "unconsolidated deposits" get transported to this valley?

13. *Read page 148. What is the point of the 3 diagrams in the center?

14. Do the diagrams in the center of page 148 show a residual soil or a transported soil?