

- d. Would you expect all rock fragments in nature to be the same size and shape?
 - e. Identify 3 weathering agents (natural ways to weather a rock).
4. Once rock fragments have been created, they are usually moved (*eroded*) by some force of nature like gravity and dropped in a new location (*deposition*). Here you will act as a depositional force.
 5. Each lab partner, in turn, should move (*erode*) and lay down (*deposit*) the rock fragments in a neat pile in the center of the foil. Set each new pile on top of the previous ones.
 6. Answer the following questions:
 - a. Describe the shape and size of spaces between your rock (crayon) pieces. Are they large or small and irregular or regular shaped?
 - b. What happens to the sediments during erosion?
 - c. Identify 3 erosion agents.
 - d. What happens to the sediments during deposition?
 7. This part of the simulation requires you to understand the cementation process. Spaces between the fragments are **reduced in size by pressure** (*compaction*) and **filled in with cementing agents** (*cementation*). This simulation will not add cementing agents. It will only simulate compaction. The compaction process occurs as sediment layers are continually covered by new layers of sediments. The lower layers become compacted by the weight of the new layers above.
 8. Carefully fold the loose layers of crayon shavings inside the aluminum foil creating a packet.
 9. Press the packet between the palms of your hands and press firmly. You can also place the packet on the table, put your palms of your hands on the top of the packet, and press down. This will *compact* your weather and eroded rocks (crayon shavings).
 10. Answer the following questions:
 - a. Describe the compaction. Are the sediments tightly or loosely compacted?