

Station options for students to discover effects of wind, water, and ice on Earth's surfaces

Station 1: Water Erosion Station

1. In a large container, form a mountain of soil about 3 inches across (wide at the top) and about 5 or 6 inches tall in the container.
2. Press the coins/chips into the surface of the dirt/clay. (Place them at different angles with the edge protruding out; leave about half the coin showing.)
3. Create a rainstorm by pouring water on the mountain with the watering can.
4. Record your observations. (Are the coins sticking out more or less? What does the bottom of the mountain look like?)
5. Remove the coins and put them back onto a paper towel to dry.
6. Drain the water into a sink.

Station 2: Wind Erosion Station

1. Form a pile of sand in the center of the box (approximately 5 or 6 inches tall).
2. Using the fan, blow air lightly over the sand from one end of the box to the other.
3. Record your observations. (Did the pile of sand move?)

Station 3: Glacier Erosion Station

1. Take a ball of clay from the container (approximately 1-2 inches in diameter).
2. Flatten the clay onto the surface on the tray.
3. Press an ice cube against the flattened clay and move it back and forth several times.
4. Record your observations. (Does anything happen to the clay when you rub the ice cube on it?)
5. Place a small pile of sand on the clay and then place the ice cube on top of the sand for 1-2 minutes.
6. Pick up the ice cube and observe the surface of the cube that was touching the sand and record your observations. (What does the bottom of the ice cube look like?)
7. Place the same side of the ice cube on the sandy part of the clay and move it back and forth several times.
8. Remove the ice cube and wipe away the sand from the surface of the clay.
9. Record your observations. (What does the texture of the surface of the clay feel like?)
10. Place the clay back where it came from and throw away the remaining ice and sand.