

Station 1: Wind Erosion

Materials: Cake pan, Sand, Box, Rocks, Sandpaper

What to do:

1. Place a pile of sand in the center of the cake pan.
2. Place the cake pan in the box.
3. Blow gently from one side of the sand TOWARD the side with the box. The box will act as a shield to keep the sand from blowing away.
4. Record your observations.
5. Rub the piece of sandpaper across the rocks.
6. Record your observations.

Station 2: Water Weight / Splash Erosion

Materials: Cake pan, Sand, Ruler, Cup of Water

What to do:

1. Place a pile of sand in the center of the cake pan.
2. Hold a cup of water 10 cm above the top of the sand pile.
3. Slowly pour the water on the sand.
4. Record your observations.
5. Re-build the sand pile.
6. Hold a cup of water 50 cm above the top of the sand pile.
7. Slowly pour the water on the sand.
8. Record your observations.

Station 3: Dissolving Rock

Materials: Cake Pan, Brown Sugar, Eyedropper, Container of Water, Wooden Block

What to do:

1. Put the block under one end of the pan so that it slopes.
2. Make a small hill of brown sugar in the middle of the cake pan. This represents a rock.
3. Use the eyedropper to drop water on the top of the "rock" hill.
4. Record your observations.

Station 4: Mechanical Weathering

Materials: Coffee can with plastic lid, Samples of rock, White Paper

What to do:

1. Put 3 samples of rock in the coffee can.
2. Shake the can 500 times.
3. Pour out all of the contents onto the white paper.
4. Record your observations.
5. CLEAN UP – put the large pieces of rocks back in the tub. Throw away the smaller, sand, dust, and gravel.

Station 5: Wave Action

Materials: Small Cake Pan, Water, Sand, Ruler

What to do:

1. Fill the cake pan with about 3 cm (about an inch) of water and let it stand until it is still.
2. Add sand to one end of the cake pan until it rises above the water.
3. Measure the height of the sand.
4. Sketch your "beach" profile (Draw what it looks like from the side.).
5. Use the side of a ruler to generate SMALL, steady, even waves in the tray. Do this 15 seconds.
6. Observe and record the action of the waves on the sand.
7. Measure the height again.
8. Make a new sketch of your "beach."

Station 6: Soil Erosion

Materials: Dishpan, Watering Can, Sand, Dirt, Gravel, Rocks, Water

What to do:

1. Mix the sand, dirt, gravel, and rocks.
2. Pile the mixture in one end of the dishpan.
3. Use the watering can to water the pile ON THE TOP.
4. Water evenly across the pile.
5. Observe and record the movement of the different sized particles.

Station 7: More Soil Erosion

Materials: Dishpan, Soil, Bottle Caps, Watering Can, Water

What to do:

1. Pile the dirt in the middle of the dishpan.
2. Press the bottle caps into the dirt on top of the mound.
3. Water the dirt evenly across the top.
4. Observe and record what you see.

Station 8: Chemical Weathering

Materials: Steel Wool, Plastic Bags, White Paper, Water

What to do:

1. There are two bags containing steel wool.
2. One bag is labeled "dry." Nothing except steel wool has been placed in this bag.
3. One bag is labeled "wet." A small amount of water has been placed in this bag along with the steel wool.
4. Take a SMALL amount of steel wool out of each bag. Rub it between your fingers over the white paper.
5. Record your observations.

