



DIY ACTIVITY

MAKE YOUR OWN MODEL OF WEATHERING, EROSION AND DEPOSITION GRADES 3-5

OBJECTIVES

- Make a model of weathering, erosion and deposition using a stream.

PROCEDURE

1. In one half of the tray make a landmass with the sand. Ensure it has a slight downhill slope.
2. Starting at the top of the hill, lightly drag a stick through the sand in an “S” shape to create a riverbed.
3. Place stones along the riverbed, which represent boulders.
4. Place a funnel at the top of the riverbed.
5. Slowly pour water in the funnel.
6. Watch the stream as it starts to flow downwards into the empty side of the tray, which represents the ocean.

MATERIALS NEEDED

- Baking tray
- Sand
- Small rocks
- Funnel
- Small stick
- Large pitcher of water

Activity duration: 30 minutes

WHAT IS GOING ON HERE?

When weathering breaks down rocks or other materials it can form small pieces such as dirt, sand, and small rocks. All of this material can get moved through erosion. This happened in the model when flowing water in the riverbed moved some of this material down the hill. Eventually these pieces ended up somewhere else, which was the ocean. This process of the material being deposited at the bottom of the hill is called deposition.

FURTHER EXPLORATION

What would happen if your hill were covered with plants and shrubs? Would this affect the processes? Think about what happens to the soil when water travels down the riverbed. Now consider what would happen to this soil if it encountered some plants and shrubs as it travels downhill to the ocean. In your science notebook, sketch a drawing of what your new landscape should look like if plants and shrubs were added. Then use your sketch to make a new downhill slope, with a riverbed. Observe what happens as the slope erodes and material gets deposited into the ocean.