HOME/SCHOOL CONNECTION—WEEK 2, B

Investigation 2: Landforms

Focus Question: How does the soil in my backyard erode?

In class we saw how setting up an erosion model (stream table) helps us to understand how earth materials can erode from the effects of flowing water. In this investigation, see how flowing water affects an area in your own backyard. If you do not have a backyard, investigate a small area in your local park or neighborhood.

Materials:

- Large plastic or paper cup
- Pencil or screwdriver
- Water in a large water bottle or a recycled plastic jug
- Rocks (optional)

Instructions:

1. Use the pencil or screwdriver to poke a hole in the bottom of the cup.
2. Go outdoors and find a soil location in your yard with a slight slope.
3. Place some rocks at the top of the slope as a marker of where you are starting the water flow.
4. Hold or lean the cup against the rocks. Be sure the water flow will not be blocked by the rocks.
5. Fill the cup with water and observe how the water interacts with the soil. If your family can help you, have them take pictures of what happens.
6. Refill the cup and repeat the water flow as many times as you need to see erosion taking place.
7. Try the investigation again but put a larger hole in the bottom of the cup or find a location that has obstacles in the slope such as rocks or plants.

- What did you observe?
- How does the soil erode in your yard?
- How does the erosion compare to what you observed in the stream tables in class?
- What happens when the flow of the water is increased (larger hole in the cup)?
- What happens when there are obstacles in the path of the water flow (rocks and plants)?