



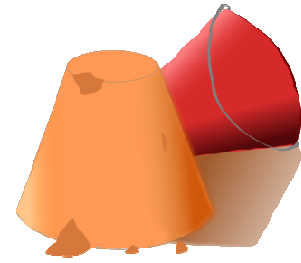
# Wondering in the Wonders of Science

## Erosion Science Trail

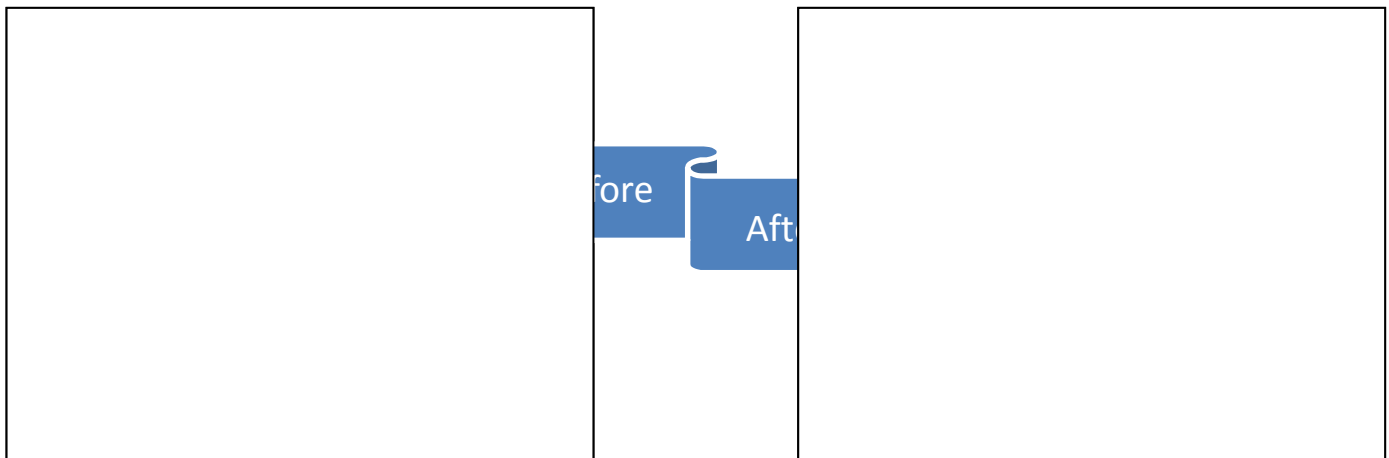
In this trail you will experience two types of erosion by doing hands on experiences that will be loaded with fun. You will get to pick a rock, name it, and write a story about the rocks life. We will start off by reading "How Mountains are Made" by Kathleen Weidner Zoehfeld, James Graham.

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**10/29/2010**

## Stop #1: Sand Volleyball Court



- Build a sand castle
- Draw a picture of your sandcastle
- Use either a straw, a hand held fan, or a battery powered fan, to erode the sand castles
- Draw a picture of the sandcastle after the erosion occurred and compare pictures



## Stop # 2: Parking Lot

- **Separate into two groups near one of the water erosion stations**
- **Discuss prediction as a small group**
- **Hold finger over straw and fill cup with water**
- **Remove finger to allow the water to erode the soil**
- **Switch stations and repeat the process**



name \_\_\_\_\_

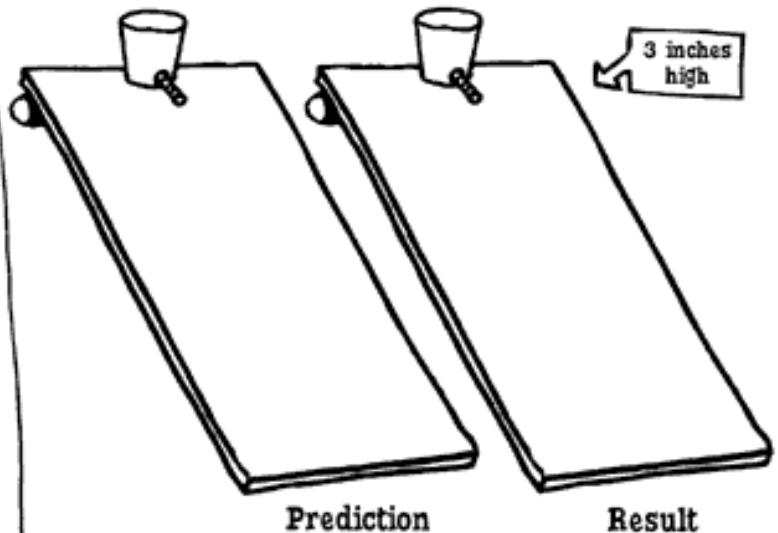
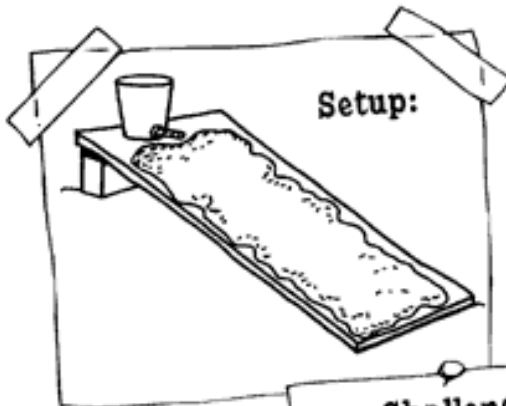
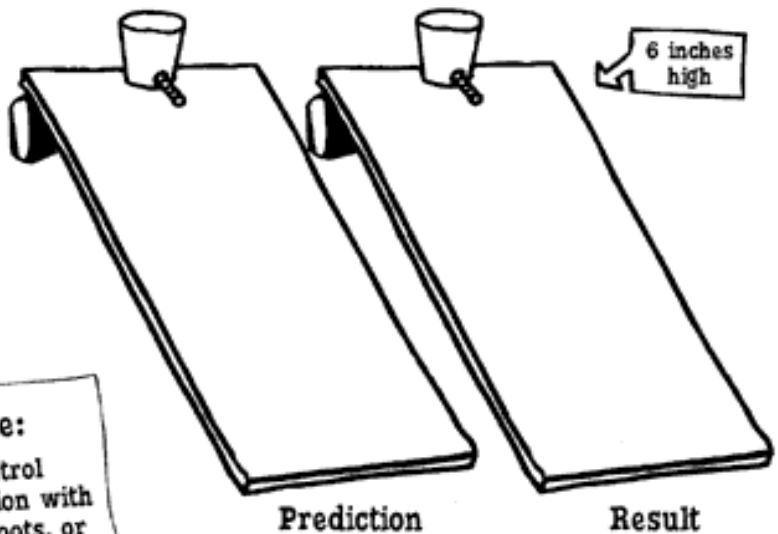
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**GET ERODED!**

Explore the force of water erosion  
and create your own landforms!

**What to Do**

1. Poke a hole in the cup near the base. Put the straw in the hole. Seal with modeling clay.
2. Prop up the board about 3 inches.
3. Cover the board with soil. Put cup at the top as shown.
4. Draw your prediction of what will happen when water runs down the slope.
5. Hold a finger over the straw end and fill the cup with water. Remove your finger. Watch water power in action. Draw the result.
6. Raise the board to 6 inches and repeat the test.

**GENTLE SLOPE TEST****STEEP SLOPE TEST****Challenge:**

Can you control  
steep-slope erosion with  
rocks, leaves, roots, or  
sticks? Try it!



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## **Teacher Page**

**Big Idea:** Characterize wind and water erosion using problem solving skills

**Standards:** Earth Science 4.2.2: Demonstrate and describe how wind, water, and glacial ice shape and reshape earth's land surface by eroding rock and soil in some areas and depositing them in other areas in a process that occurs over long period of time

### **Stop #1: Sand Volleyball**

**Objective:** Using sandcastles, students will demonstrate one form of erosion

**Assessment:** Observe students eroding their sand castles

- Discuss ways erosion could occur (wind and water)
- Have students change the direction and angle the wind is coming from

### **Stop #2: Parking Lot**

**Objective:** Given a slope covered with soil, students will perform water erosion experiments successfully

**Assessment:** Observe students performing water erosion

- Set up two water erosion stations following the Magic School Bus worksheet
- Discuss the results with the students
- Discuss what would happen if you added obstacles

### **Stop #3: Mall**

**Objective:** Given a rock, students will write a narrative indentifying the rock saying which type of erosion occurred

**Assessment:** Read the narratives looking for the type of erosion (water or wind)

- Have rocks ready for students to pick from
- Explain the difference between an eroded and non-eroded rock