

Erosion Engineering

Preparation Before Class

For each group of students at a table (or for a single homeschool student), you'll need a container of cornmeal "land" and for each pair of students, you'll need a "drip stick". If you already prepared the "land" and "drip sticks" for the prior lesson, you can reuse them in this activity.

Make cornmeal "land"

Each group of 4 students needs about 1 cup of "land." The mixture is made of 3 parts cornmeal to 1 part salt and 1 part water. The table below gives you the amounts for specific numbers of students. After mixing it all up in a mixing bowl, it should be a little stickier than wet sand. If it's too sticky and doesn't slide out of a cup easily, add more cornmeal. If it's not sticky enough, add more water. For each group of 4 students, put about 1 cup of "land" into plastic containers. Cover with a lid until ready to teach.

| How many students? | How much cornmeal? | How much salt? | How much water? | How much "land"? |
|--------------------|--------------------|----------------|-----------------|------------------|
| 6 | 1 ½ cups | ½ cup | ½ cup | 2 cups |
| 12 | 3 cups | 1 cup | 1 cup | 4 cups |
| 24 | 6 cups | 2 cups | 2 cups | 8 cups |
| 30 | 7 ½ cups | 2 ½* cups | 2 ½ cups | 10 cups |

* Note: Salt is often sold in 26-oz containers. That's about 2½ cups of salt.

Make "drip stick" rainmakers

You'll need a "drip stick" for each pair of students (or single homeschool student).

1. Use a pushpin to poke a hole in the bottom of a small plastic condiment cup. Put the hole close to one side of the cup. Wiggle the pin to make a large hole.
2. Position the condiment cup in the center of a ruler, with the hole extending over the edge. Use some sticky tack to hold the cup securely in place.
3. With a permanent marker, draw an arrow on the side of the cup, pointing down at the hole.

