Cornmeal Canyons
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". You can reuse both the "land" and "drip sticks" for the activity in the next lesson - Erosion Engineering.

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

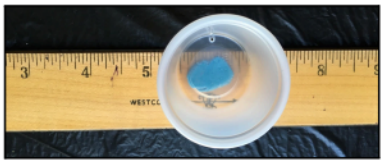
* Note: Salt is often sold in 26-oz containers. That's about 2½ cups of salt.

Make "drip sticks"

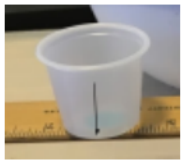


You'll need a "drip stick" for each pair of students (or single homeschool student).

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.

OPTIONAL ADD-ON
Make shakers (Optional)



To help your students visualize changes in their “land”, you can make Solo cup shakers for each pair of students (or single homeschool student) so that they can sprinkle cinnamon on top of their “land”.

1. Use a pushpin to poke 6 holes in the bottom of a plastic Solo cup.

2. Turn the cup over and add a teaspoon of cinnamon, pepper, or flour.

3. To sprinkle, students tap the side of the cup.