

[← Work of Water Unit](#)[Share](#)

## What's strong enough to make a canyon?

Exploration	12 min
Hands-On Activity	45 min
Wrap-Up	3 min

### Activity Prep

In this lesson, students make hypotheses and investigate the causes of canyons. In the activity, Cornmeal Canyons, students create a model landform using cornmeal. Then they drip water over this “land” to observe how water can change its shape and to understand how, over long periods of time, canyons can be formed through a similar process.

#### COVID-19 Adaptations

- ✓ Digital worksheets available
- ⚠ Teacher demo recommended



#### Students at home

Set up a few cornmeal mountains and demonstrate the activity over video conference. Students can record their observations the *How Did Water Change Your Land?* worksheet (printed or digital).



#### Students at school

Set up a few cornmeal mountains and demonstrate the activity for your students. Students can record their observations on the *How Did Water Change Your Land?* worksheet.

Number of students:

**Cornmeal Canyons Prep****Instructions** teacher-only resource**1 copy****How Did Water Change Your Land?** worksheet**30 copies**

Clean-up Supplies (Eg. Paper Towels)

**1 roll**

Mixing Bowl

**1 bowl**

Rulers

**15 rulers**

Table Covering (eg. Trash Bags)

**16 bags**

Cornmeal

**8 cups**

Dixie Cups (3 oz)

**60 cups**

Measuring Cup

**1 cup**

Paper Plates

**15 plates**

Plastic Containers w/ Lids

**Details** ▾

*Each container must be large enough to hold about 1 cup of cornmeal "land."*

Plastic Plates (10")

**15 plates**

Plastic Spoons

**30 spoons**

Push Pins

**1 pin**

Salt

**3 cups**

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Small Binder Clips (3/4")	<b>30 clips</b>
Solo Cups (9 oz)	<b>45 cups</b>
Plastic Cups (1 oz)	<b>15 cups</b>
Sticky Tack	<b>15 strips</b>

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### Prep Instructions



You will need access to water for this activity.

Students will need to cover their workspaces with a table covering (e.g., trash bag) in case of spills.

We suggest students work in pairs and share materials with another pair of students at the same table cluster. Homeschool students can work on their own.

### Prepare the Cornmeal "Land" and "Drip Sticks" Before Class

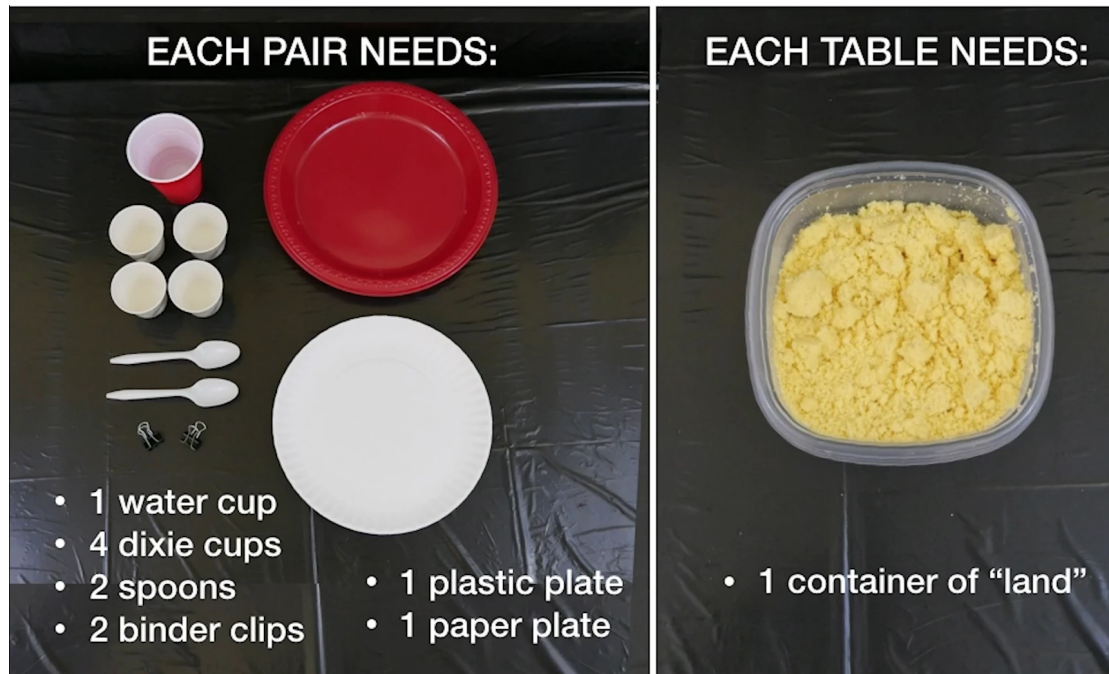
For each group of four students, you'll need to prepare a container of cornmeal "land." For each pair of students, you'll need to prepare a "drip stick." This will take about 15 minutes. You need a pushpin, a permanent marker, a mixing bowl, and a measuring cup. [Here are instructions.](#)

### Fill Solo Cups with Water

Two Solo cups will be used to support each pair's "drip stick" apparatus. For each pair of students, fill another Solo cup about halfway with water.

### Organize Materials for Distribution

We suggest that you create supply distribution stations for students. In the first part of the activity, students will need the following supplies:



After students set up their cornmeal "land," students will need the following additional materials:



### Save Materials for the Next Lesson

If you plan to teach the next lesson in this unit:

- Save your cornmeal "land." Pour it back into the food storage containers and keep them covered until you teach the next lesson.
- Save your "drip sticks."
- Save the plastic plates and all the Solo cups.