

Start with a Book: River Rangers

# Erosion Exploration



## Introduction

Erosion is what happens when parts of landforms get moved around thanks to wind, water, ice, and gravity. Water's ability to move materials from one place to another make it a big player in the erosion process. Let kids get a close-up look at erosion with this experiment.

## Supplies

- Sand
- Dirt
- Potting soil
- Pebbles or gravel
- Lots of large, shallow pans or other containers
- Spray bottle
- Watering can
- Cup
- Water
- Pencil, paper, or journal for recording observations

## Get kids thinking ...

Let kids get their hands dirty to make observations about the sand, dirt, soil, and gravel.

**START BY ASKING A COUPLE OF QUESTIONS:** How does each material feel? What's the same? What's different? How do they think water would affect each?

Talk about erosion and the role water plays. Have kids create landforms in the shallow pans using the materials provided. Encourage them to make a landform from each of the materials and landforms that are combinations of the materials, but only one landform per pan. Provide a little water to help shape and hold landforms together.

Have everyone wash and dry their hands so they can draw pictures of how their landforms are shaped and write down predictions about how their landforms will stand up to the forces of water and gravity.





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Provide water for the spray bottle and watering can. **ASK KIDS:** What happens when landforms are misted with water? How is the dry “land” affected? What happens once the “land” is saturated?

Now raise the end of the pan that includes the landform and place a book or other object under the pan to hold it up at an angle. Have the kids add water to the landforms, experimenting and observing what happens with the spray bottle, the watering can, and water poured from a cup.

**ASK THE KIDS:** What happened to each of the landforms? How did your landforms change? Draw pictures of the eroded landform to compare them to the originals.

For a big finish — especially if doing these activities outside — flood the landforms!

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## More erosion activities

**MIGHTY RIVER IN A GUTTER: SEDIMENTS ON THE MOVE (EARTH LEARNING IDEA)**  
[earthlearningidea.com/PDF/River\\_in\\_a\\_gutter.pdf](http://earthlearningidea.com/PDF/River_in_a_gutter.pdf)

**HANDS-ON ACTIVITY: EROSION IN RIVERS (TEACH ENGINEERING)**  
[teachengineering.org/activities/view/nyu\\_erosion\\_activity1](http://teachengineering.org/activities/view/nyu_erosion_activity1)

