

Paper Mountains

3rd - 5th
Grade

Materials

-  Paper
-  Washable markers
-  Dropper bottle
-  Water
-  Plate/Tray

Students will learn about massive Earth systems through a miniature experiment.

Earth is a constantly changing and dynamic system. The shape of the land and the pull of gravity both influence how water moves over Earth. The paper mountains in this activity will behave like a miniature model watershed.

Directions

1. Crumple up a piece of paper and gently open it most of the way. It should still show ridges (high points) and valleys (low points).
2. Choose one of the ridges and color the whole ridgeline with a washable marker. Use lots of ink! Place the paper on your plate or tray.
3. Make a prediction. If water fell on the ridge you just colored, where would it go? What would happen to the colored ink? Now, test your prediction. Use the dropper to place water onto the peak, simulating a rainstorm.
4. Was your prediction correct? Were you surprised by anything?
5. Repeat this experiment with more ridges on your crumpled paper. Do your predictions change as you make and observe more simulated rainstorms?
6. The way the marker ink moves with the water represents how water can carry material through a watershed. A watershed is all of the land that drains runoff into a body of water. Rainwater can pick up and carry whatever is on the land - such as dirt, sand, or even trash - to the nearest body of water. When that happens over and over again over many, many years the water can even change the shape of the land! If you're curious how water can shape things like mountains and valleys, check out the experiment in this [video](#).

