



Paper Rivers

SANTA FE
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Rivers populate every corner of the Earth. They feed the oceans and provide fresh water for plants and animals. But how are they made? Why do they move? Where do they go? Let's create a paper mountain and discover how rivers form and flow in our very own experiment.

Materials Provided

2 Blank sheets of White Paper 8.5x11
Blue Washable Marker
Spray Bottle
Tape

Materials from Home

Optional Table Coverings (e.g. Trash bag, towel, cardboard)
Water to fill your spray bottle



Instructions

Cover your work station with a table covering; plastic or cardboard work well. Fill your spray bottle with water. Now take one piece of paper and crumple it around the outside of your fist. Take it off your fist and crumple it up some more! Now, unwrap the paper carefully to form your mountain! Line up the corners of your paper with the other piece of paper, but don't go all the way to the very edges, leave about an inch on every corner. Tape the corners down. Look at your model and decide where the three highest places (or "peaks and ridges") are. Color those high peaks and ridges with the blue marker so just the fold of the paper has ink. Color those same areas over again a few times so they are fully saturated with blue. This is important for the next phase of the experiment to be successful. Spray the model five times with your water bottle, then WAIT one minute (just count to 60!). Now, spray it again, at least five more times (like rain!). See the blue rivers flow? What happened when it rained on your model?

Inquiry Based Questions

1. Where did the water flow? why?
2. Where did it puddle? Why?
3. Now you made a mountain, what if you made a crater? What happens to the water then?

Answer

1. The water flows down the mountain slope. It follows the cracks and folds in the paper because of gravity to make rivers.
2. Puddles form where there are bowls, or depressions, in the Earth.
3. The water would puddle up in the crater to form a lake!