

How to Fill Up a Great Salt Lake



Ten million birds fly to the Great Salt Lake every year. The water in the Great Salt Lake is important. Some birds like the salty part of the lake, and some like the wetlands near the lake where the water is fresh. How does the water get in the lake?

Imagine you want to fill up a lake. How would you do it?

Grade Level	K-2nd Grade
Activity Length	1-2 Class periods, 30 min to 1hr.
Materials	Paper Watercolor markers Water and a place where it is safe to sprinkle it Photographs of Great Salt Lake, mountains and watersheds

This activity is a good one to talk about patterns, comparing photographs of different mountain ranges and models to help students identify landforms. It is also a good lesson to talk about cause and effect, and how the shape of mountains influence how the water flows.

Older students might be ready to begin talking about watersheds and the water cycle system.

Science/Engineering Standards

Standard 2.1.1 Develop and use models illustrating the patterns of landforms and water on Earth.

Social Studies Standards

Kindergarten, Standard 3:1- Identify geographic terms that describe their surroundings.

Grades 1, Standard 3:1- Identify and use geographic terms and tools.



How to Use this Activity



Show photographs of the Great Salt Lake. Ask students, "How does the water get in the Great Salt Lake?" Students will likely come up with the idea of rain, snow, and rivers.

Project for students photographs of the mountain ranges. Ask them to point out the following features:

Mountain tops or mountain ridges

Mountain sides

Valleys

Ask students to imagine that it rains a lot on the mountains. Have students point out where they think the water will go on the photograph. Ask them where they think the water will end up in the end.

The second part of this activity can either be done individually by the students or as a demonstration by the teacher. When doing it as a demonstration, use a larger piece of paper. It is recommended only as a demonstration for younger students, and to conduct the demonstration outdoors or someplace where a little water on the surfaces won't cause any problems. Some choose to do this in a flat tray or shallow tub so students can watch.

Using this lesson for Distance Learning Options:

Students who do this at home will need adult supervision. As a group discuss photographs of mountains. If students are able to annotate on the screens, allow them to mark where mountain tops and ridges are, and where the water will flow down a mountain. Ask them where the water will end up.

Show the students the crumpled paper model. Direct them in making their own and coloring it. They will then need home supervision for dripping water on the model. The teacher can demonstrate how it can be done outside or in a sink. Have them talk about what they notice.

Activity Alternatives

Students can go find a area of dirt where the ground is not even, and predict what will happen if they sprinkle water on the highest area. They can study how the water runs and where it eventually ends up. Ask what happens to the water if it ends up in a puddle. Will it stay there forever? What happens to objects that are floating in the water? Will they disappear when the water dries up?

Ask student what do they think happens to objects or minerals that wash into the Great Salt Lake.

As an extension activity, ask students to think about where the rain goes in their neighborhoods. Do they know where it ends up?



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This is a part of the Great Salt Lake. How did the water get here?



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Look at the following pictures. Point to the mountain tops and ridges, the mountain sides, and the valleys. Imagine that it is raining in the mountains. How will the water flow?



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Loosely fold down the corners of a piece of paper.



Turn the paper over and crumple it.



Uncrumple the paper, adjusting it as necessary, so that you have a basin in the middle with higher sides all around.





Tell the students that this is a model of a mountain range, and a watershed, with a basin in the middle. Tell them that the Great Salt Lake is a basin. Using water color markers, color in dots where the students identify mountaintops and lines where there are ridges.

Using your fingertips dipped in water, or a water dropper, make it rain on your model. As students to predict and observe

- which direction the water will go (downhill, down the valley or wash or ravine, etc.)**
- what happens to the water after it gets to the basin (it will stay there, it will sink into the ground, it will dry up)**

If you have time, put specks of glitter on the mountainsides. Wash them down into the basin with water. Ask what happens to the glitter after it gets into the basin. Does it go away? What happens if all the water dries up, where is the glitter then? Older students may be able to understand that materials from the mountainsides may eventually end up in stuck in the lake. Explain that this is how the lake gets salty. Salt from some of the rocks on the mountainside washes down and gets stuck in the lake. Ask them what might happen if there is pollution on the mountainsides.

