



HANDS-ON EXPERIMENTS

GLACIAL EROSION

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EQUIPMENT

A lot of the world's surface has been changed in a destructive way by glacial activity. That doesn't mean it's a bad thing, only that glaciers have carved out parts of the Earth's surface to create many mountainous areas and valleys.

But it isn't just the ice in the glaciers that is responsible for creating glaciated valleys and other related features. As the glacier moves along it picks up rocks and boulders that scrape along the valley floor, accelerating the process.

In this experiment we can see how that process works.

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INSTRUCTIONS

Step 1: The day before the experiment, create some mini glaciers with your ice cube tray and put them in the freezer. You'll need to make 4 different types. In the first row of the tray sprinkle some sand before adding water. In the next sprinkle some grit. Increase the size of the grit as you progress;

Step 2: Using 4 different parts of the soap bar, scrape each size of grain glacier across the bar just once and record your findings;

Step 3: Once you've recorded your findings repeat the process 3 more times to see what happens to the valleys on the soap bar. Record your findings.

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A Bar of Soap

Sand

Gravel

Stones

Ice cube

Tray

Water



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FURTHER INVESTIGATION

- What happens if you mix large and small particles together?
- Do you think that adding more dirt and grit will give a deeper valley?**
- What happens if there's just ice and no dirt in the glacier?
- How deep can you make the valleys before the ice melts?**



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VIDEOS FOR THIS RESOURCE AT:

INTRODUCTION:



Clickable Link:

<https://youtu.be/Nl7Yef5SwbA>

CONCLUSION:



Clickable Link:

<https://youtu.be/j8ViRhF4kUU>

