



HANDS-ON EXPERIMENTS

GLACIAL LANDSCAPES

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Sometimes when there's no ice around it's hard to imagine how glaciers would have carved out the landscape.

To imagine how a glacier would have travelled from the mountains across a landscape and eventually spreading and melting seems too big to even think about.

We owe a lot of our landscapes to glacial erosion and we can recreate their flow in this experiment.

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INSTRUCTIONS

Step 1: The first part of this experiment is to make a paper mache landscape for our glaciers. Using crunched up newspaper and strips of newspaper, make a mountainous environment for our glaciers. You could paint the landscape also. A good tip would be to add lips to the bottom of the valleys for the glaciers to accumulate. Let the landscape dry ready for lesson 2;

Step 2: Create a glacier solution by mixing Corn Starch with water, adding a small amount of food colouring, then more Corn Starch if needed. This will create the slime we need for the glaciers;

Step 3: Once the landscapes and glaciers have been created its time to put the glaciers onto the land itself. You can place some of the slime over the peaks of the mountains and some on the slopes. You can add more and more slime to represent new snowfall accumulation over the years.

Step 4: Photograph the start of the glacier process. You can add markers for specific times and observe the flow of the glacier down the valleys.

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Approximate time: 2 Full Lessons

EQUIPMENT

Lots of Newspaper
PVA or Elmers Glue
Corn Starch
Blue Food Colouring
Water

2

FURTHER INVESTIGATION

- Try experimenting with different consistencies of glacier
- You could add sediment to the glacier to see how the flow changes**
- Does the glacier move more quickly on steeper terrain?
- What happens if you leave a small rock in the path of the glacier?**

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VIDEOS FOR THIS RESOURCE AT:

INTRODUCTION:



Clickable Link:

https://youtu.be/fmCj_VgYYEA

CONCLUSION:



Clickable Link:

<https://youtu.be/-Dw1wbhXvgM>

