

- Students should observe that the moving “glacier” carries rocks and sediment from the walls of the valley as it moves downhill.
  - Students should observe that the melting ice produces a stream that flows downhill from the “glacier.” Many rivers and streams originate where glaciers melt.
10. Explain that valleys eroded by glaciers are U-shaped, while valleys eroded by flowing water are V-shaped. Glaciers pick up and drag sediments and rocks that erode both the sides and bottom of the valleys through which they slowly move. Streams and rivers, on the other hand, move rapidly downhill. This fast moving water carries sediment and rocks that erode mainly the bottoms of the channels through which it flows, thereby creating V-shaped valleys.
  11. Explain that glaciers cover approximately 10% of the Earth’s surface and that 85% of the Earth’s fresh water is frozen in glacial ice.
  12. Explain that in addition to glaciers and flowing water, wind also erodes the land. Show students the CD-ROM sequence that discusses the effects of wind erosion.



Select Inquiry #9 “Erosion” and view the “Erosion” sequence.

13. Give each student a copy of Activity Four, the focus questions. Have students work individually, in pairs, or in larger groups to answer the questions. Discuss the answers.

## Evaluate

The following student work could be used for assessment purposes:

- Activity One: Agents of Erosion
- Activity Two: Erosion Investigation
- Activity Three: The Effects of Glaciers on the Earth’s Landscape
- Activity Four: Focus Questions for Erosion

## Enrichment Activities



1. Have students research the different geologic formations that have been created by the action of glaciers. They may wish to choose one of these formations for their performance assessment projects.



2. Have students research what happens to various types of rock when water is frozen and thawed repeatedly in the rocks’ cracks.
3. Have students conduct research to identify different bodies of water - rivers, lakes, and fjords - that have been formed by glacial activity.
4. Have students research to discover what an icefall is and how icefalls are formed.