

Moraine Ridge Comparison Activity

Activity Overview

Students compare the Summit Lake Moraine—a ridge created at a glacier margin—with nearby kettle terrain formed by collapse. They analyze differences in shape, slope, and formation.

Materials Needed

- Base maps
- Pencils or markers
- Optional: diagrams of moraine cross-sections

Step-by-Step Instructions

1. Bring students to a clear view of the moraine ridge.
2. Ask students to observe how the moraine is continuous and ridge-like.
3. Compare this with irregular kettle-and-kame terrain.
4. Students sketch both landscapes and label key features.
5. Discuss how glaciers push/dump sediment versus how melting buried ice collapses.

Teacher Notes

- Moraine ridges usually form parallel to the ice margin.
- Kettle topography is chaotic and discontinuous.
- Useful discussion: how could you identify a moraine on an aerial image?