



Ice Cream Glaciers



Developed by Heather Spalding for the UH-Manoa GK-12 program

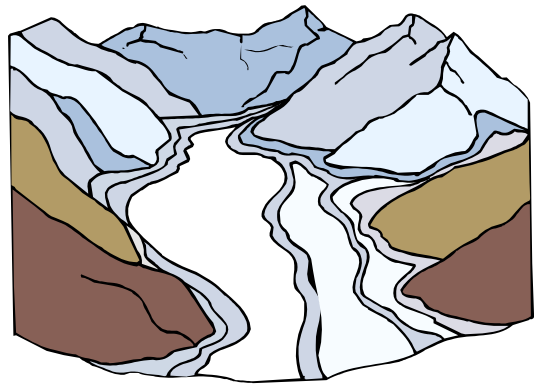
The awesome force of a glacier or ice sheet can carve impressive valleys, such as Yosemite Valley, and can bulldoze wide swaths of continents. The rock and soil picked up and transported by glaciers creates new landscapes as it is eventually deposited by melting and retreating glaciers. "Drift" is the generic term for all glacially deposited material.

Activity

Using the materials provided below, create your own glacial terrain in action using ice cream to represent your glacier. You must use at least **3 terms** below in building your glacial terrain, and be able to explain and demonstrate these terms to the class in your presentation at the end of the class period. Work in groups of four, and work fast!

Materials

- Ice Cream Sandwiches
- Vanilla ice cream
- Sugar
- Gumballs
- Nerds candy
- Chocolate cake
- Oreo cookies
- Tangerines
- Plates



Here's a short glossary of different types of glacial and ice sheet depositions:

Glacial flour - rock ground to the texture of a fine powder. It usually flows out of a glacier as sediment in a glacial meltwater stream running from the glacier.

Till - refers to an unconsolidated and unsorted mixture of sediment, clay, gravel, and rocks deposited by a glacier.

Moraine - a French word that refers to any glacier-formed accumulation - there are a variety of moraines.

Terminal moraine - an accumulation at the outermost edge of where a glacier or ice sheet existed.

Recessional moraine - moraine located "behind" the outermost edge of a glacier, formed when the glacier lingers in one spot for a long time.

Ground moraine - gently rolling hills and plains deposited by ice.

Lateral moraine - ridges of till on the sides of a glacier.

Medial moraine - a moraine formed when two glaciers merge (a tributary and trunk glacier) and their lateral moraines come together to form a single moraine.

Push moraine - a moraine created by till that was a moraine deposited by an earlier glacier that once covered the area.

Ablation moraine - a moraine formed from material that fell upon the glacier.

Glacial erratics - large boulders that had been carried by the ice and deposited.

Glacier info. from

<http://geography.about.com/od/physicalgeography/a/glacierdeposits.htm>