

Glaciers

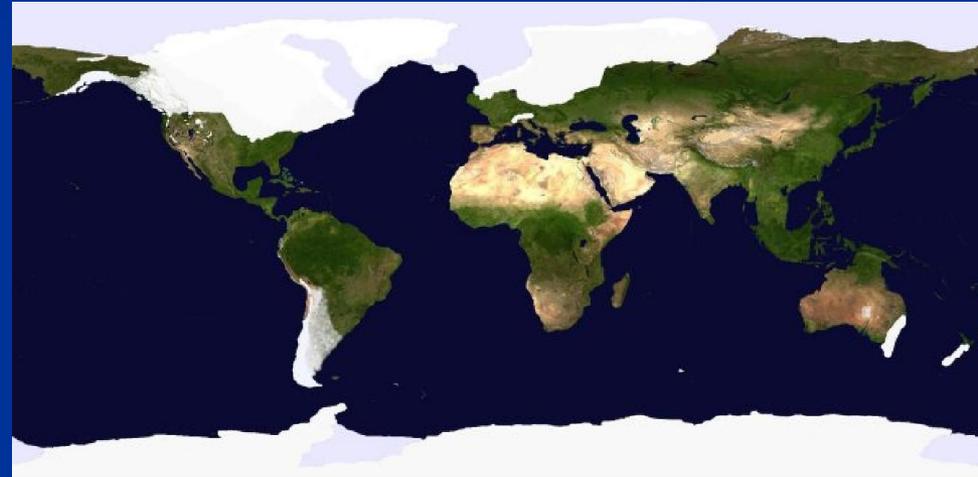
What are glaciers?

- Glaciers are very large moving masses of ice.
- They form near Earth's poles and in mountains at high elevations.
 - **Areas where more snow falls than melts!**
- The snow in these areas is compacted and recrystallized into ice.
 - An example of this is making a snowball.



World Glaciers

- They cover 10% of the Earth's surface!!!
 - If all land ice melts ocean rise 230 ft.
- In the last ice age the glaciers covered 30%
 - This ice age ended 10,000 years ago
- There are two types of glaciers: valley & continental



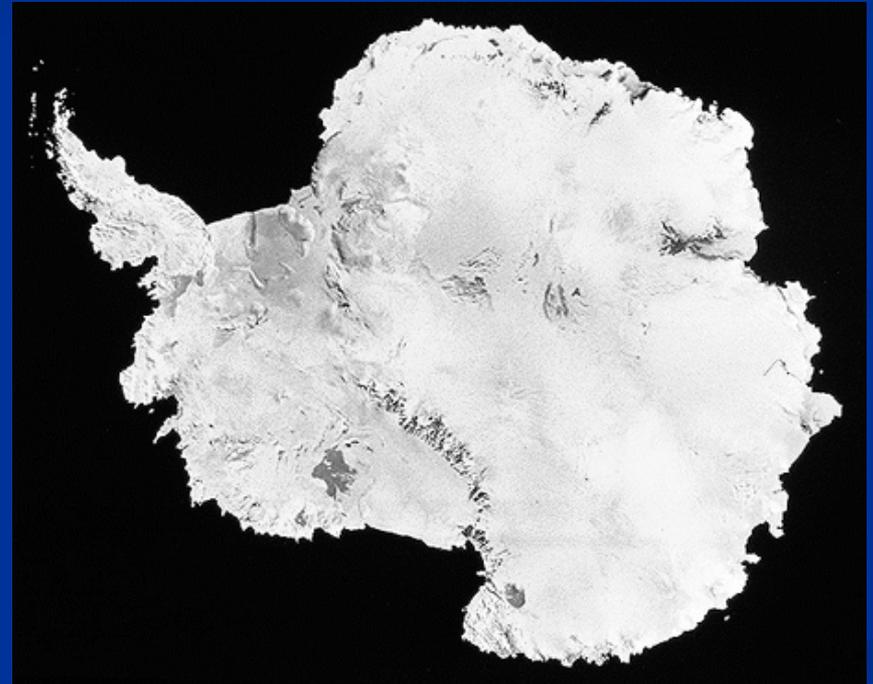
Valley Glaciers

- Valley glaciers are form in valleys in mountainous areas.
- They flow down the valleys like a thick liquid. (ex. Slushi)
- These glaciers will carve and widen a valley



Continental Glaciers/Ice Sheets

- A continental glacier covers a continent-sized area.
- These form in very cold, polar regions. (Ex. Antarctica, Greenland)

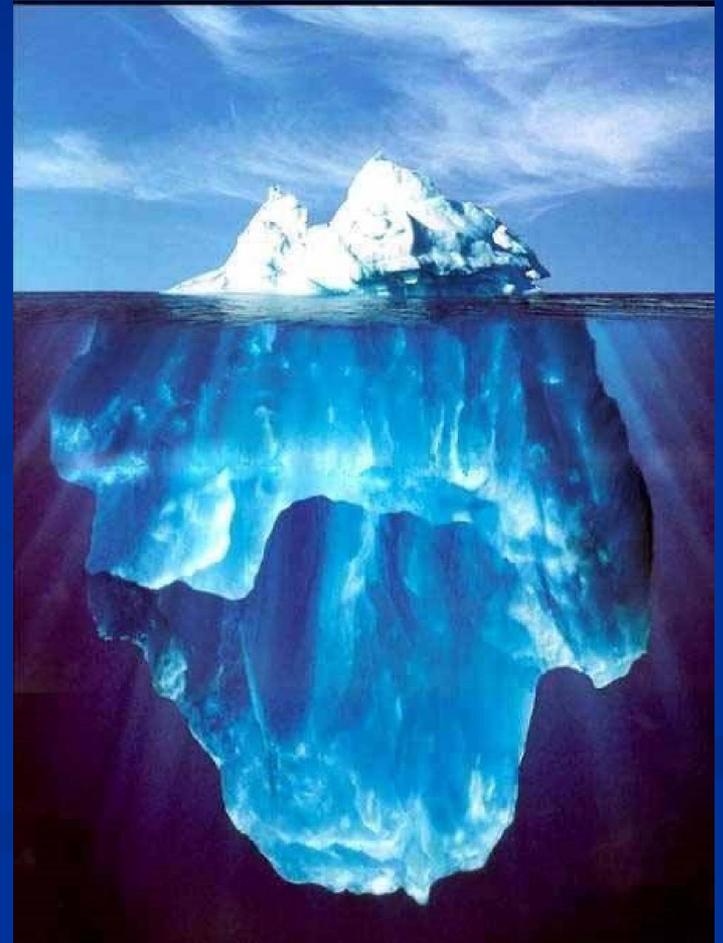


Advancing and Retreating

- When we have glaciers that are changing size we call them advancing and retreating.
- Advancing glaciers are growing, while retreating glaciers are shrinking.
- Modern day glaciers are shrinking from a global increase in temperature. (global warming)

Icebergs and Glaciers

- Icebergs come from glaciers in a process called calving.
- The iceberg will break off from the continental glacier.



Till and Moraine

- As the glacier moves and melts it leaves behind sediment. This sediment is called **till**.
- An accumulation of sediment on the sides of a glacier is called a **moraine**.



Kettle Lake and Meltwater Stream

- Since glaciers are ice they leave behind a large amount of water as they melt.
- A kettle lake is formed when a large piece of ice breaks off and is left to melt.
- A meltwater stream is a stream formed from melted glacier water.



Glacial Deposition

- These meltwater streams can carry sediment down the glacier and then deposit them on dry land.
- This land is called an outwash plain.

