GLACIERS
How do glaciers help shape our Earth?
Glacier - naturally formed mass of ice and snow that moves downhill under the force of gravity
Glacier Movement:

- As snow and ice accumulate the glacier moves forward under its own mass and the pull of gravity.
- Sometimes called a “river of ice” glaciers act like fluids and flow in a plastic-like motion.
Types of Glaciers:

- **Continental Glaciers** - huge sheets of ice that cover entire land masses
- **Valley Glaciers** - glaciers that form in high elevations in mountain valleys
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Continental Glacier  Valley Glacier
Glacial Features:

- **U-Shaped Valleys** - shape of the valley walls from glacial erosion
Erratics - large deposited fragments that can be transported hundreds of miles inside or on top of the glacier.
Drumlins - streamlined oval shaped mounds of unsorted sediment
Eskers - a long winding ridge of unsorted sediments
Terminal Moraines - a mound of till deposited along the leading edge of a glacier.

Till - unsorted sediments deposited by a glacier.
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Terminal Moraine
Glacial Grooves - long parallel scratches formed by sediment embedded in a glacier that has passed over the surface.

The grooves indicate the direction the glacier has traveled.
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• **Kettle Lake** - depression left in the ground that is filled with glacial melt water

  • Example: Lake Ronkonkoma
- Outwash Plain - broad glacial feature of smaller sediment carried from the melting water of a retreating glacier

- Example: Southern Long Island