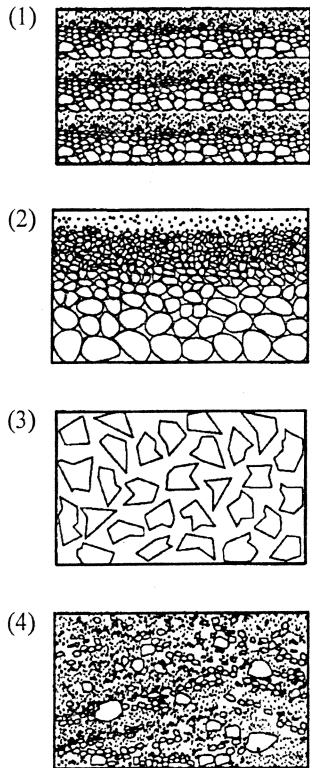
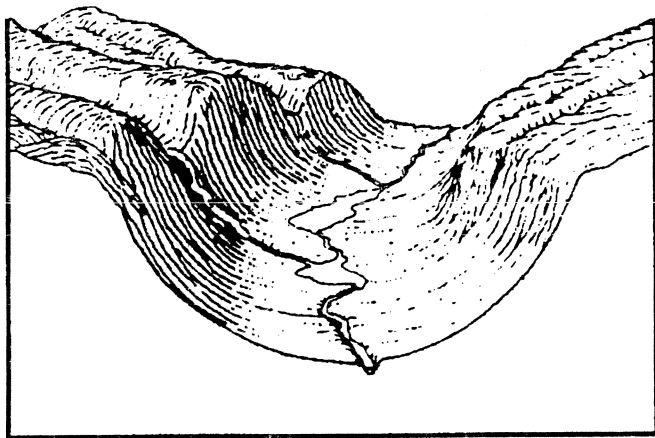


10. Which diagram best illustrates a cross section of sediments that were transported and deposited by a glacier?



11. The diagram below represents the surface topography of a mountain valley.



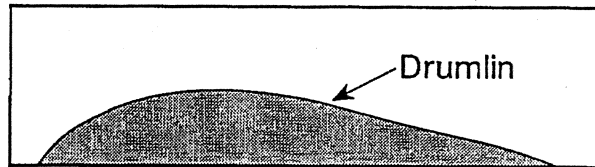
Which agent of erosion most likely created the shape of the valley shown in the diagram?

- (1) wind
- (2) glaciers
- (3) ocean waves
- (4) running water

12. Which landscape feature was most likely formed by glacial activity?

- (1) an eroded plateau
- (2) a flat floodplain
- (3) a U-shaped valley
- (4) a V-shaped valley

13. The diagram below represents a side view of a hill (drumlin) that was deposited by a glacier in central New York.



This hill is most likely composed of

- (1) cemented sediments
- (2) unsorted sediments
- (3) vertically layered sediments
- (4) horizontally layered sediments

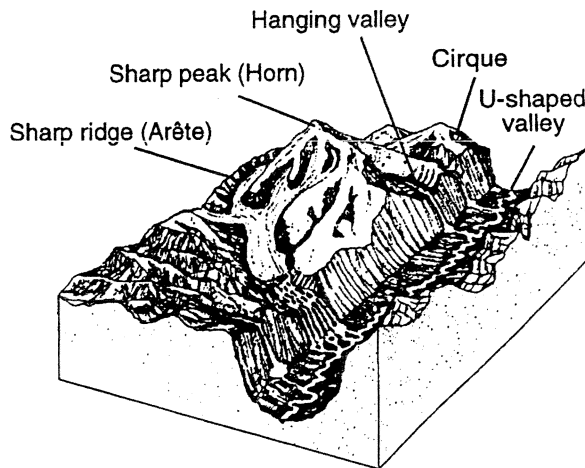
14. Glacial movement is caused primarily by

- (1) gravity
- (2) erosion
- (3) Earth's rotation
- (4) global winds

15. Which geologic evidence best supports the inference that a continental ice sheet once covered most of New York State?

- (1) polished and smooth pebbles; meandering rivers; V-shaped valleys
- (2) scratched and polished bedrock; unsorted gravel deposits; transported boulders
- (3) sand and silt beaches; giant swamps; marine fossils found on mountaintops
- (4) basaltic bedrock; folded, faulted, and tilted rock structures; lava flows

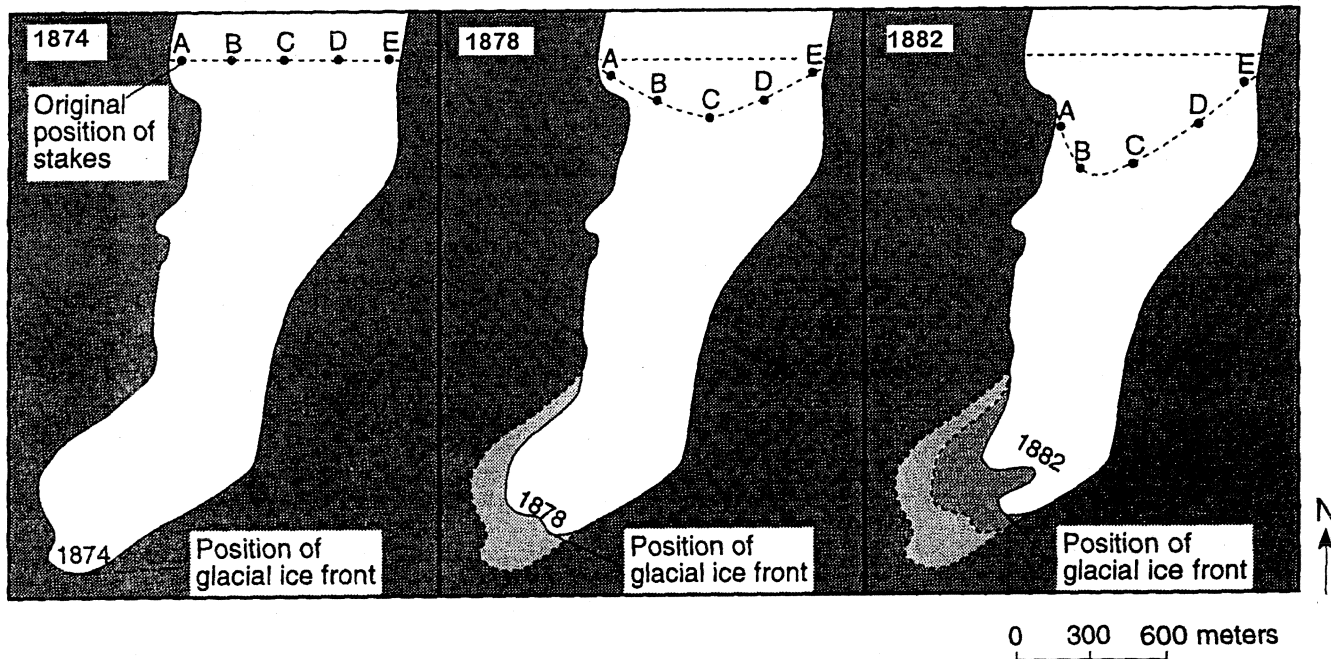
16. The diagram below represents a landscape area.



The labeled surface features of this landscape area resulted mainly from

- (1) wind erosion
- (2) wave erosion
- (3) stream erosion
- (4) glacial erosion

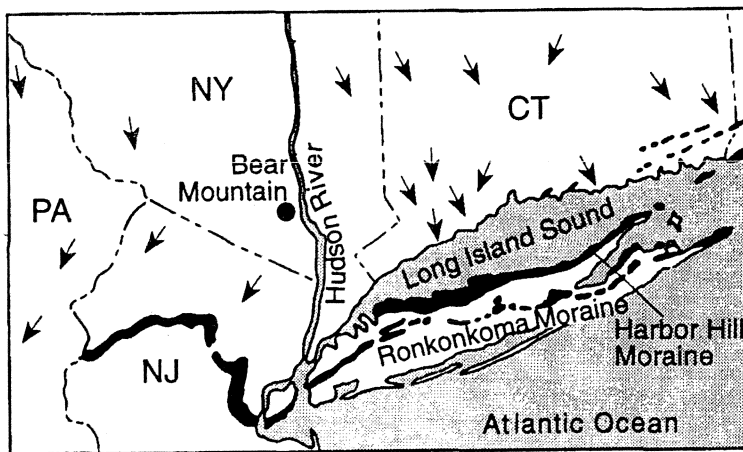
17. Base your answer to the following question on the three maps below, which show the ice movement and changes at the ice front of an alpine glacier from the years 1874 to 1882. Points A, B, C, D, and E represent the positions of large markers placed on the glacial ice and left there for a period of eight years.



The changing positions of markers A, B, C, D, and E show that the glacial ice is

- (1) slowly becoming thicker
- (2) forming smaller crystals
- (3) gradually shifting northward
- (4) moving fastest near the middle

Base your answers to questions 18 through 20 on the *Earth Science Reference Tables* and the map below. The arrows on the map show the location and orientation of glacial striations on the surface bedrock. Dark shading shows the location of large moraines (glacial deposits).



18. The striations indicate that the movement of glacial ice was toward the

- (1) northeast and northwest
- (2) northeast and southwest
- (3) southeast and northwest
- (4) southeast and southwest

19. How were the striations made?

- (1) Frost action cracked the bedrock during the ice age.
- (2) Rocks at the bottom of the glaciers were dragged over the bedrock.
- (3) Particles carried by winds scratched the bedrock during the ice age.
- (4) Particles carried by glacial meltwater eroded the bedrock.