

Name: _____

1.

Base your answer to the question on the diagram below. The arrows show the direction in which sediment is being transported along the shoreline. A barrier beach has formed, creating a lagoon (a shallow body of water in which sediments are being deposited). The eroded headlands are composed of diorite bedrock. A groin has recently been constructed. Groins are wall-like structures built into the water perpendicular to the shoreline to trap beach sand.

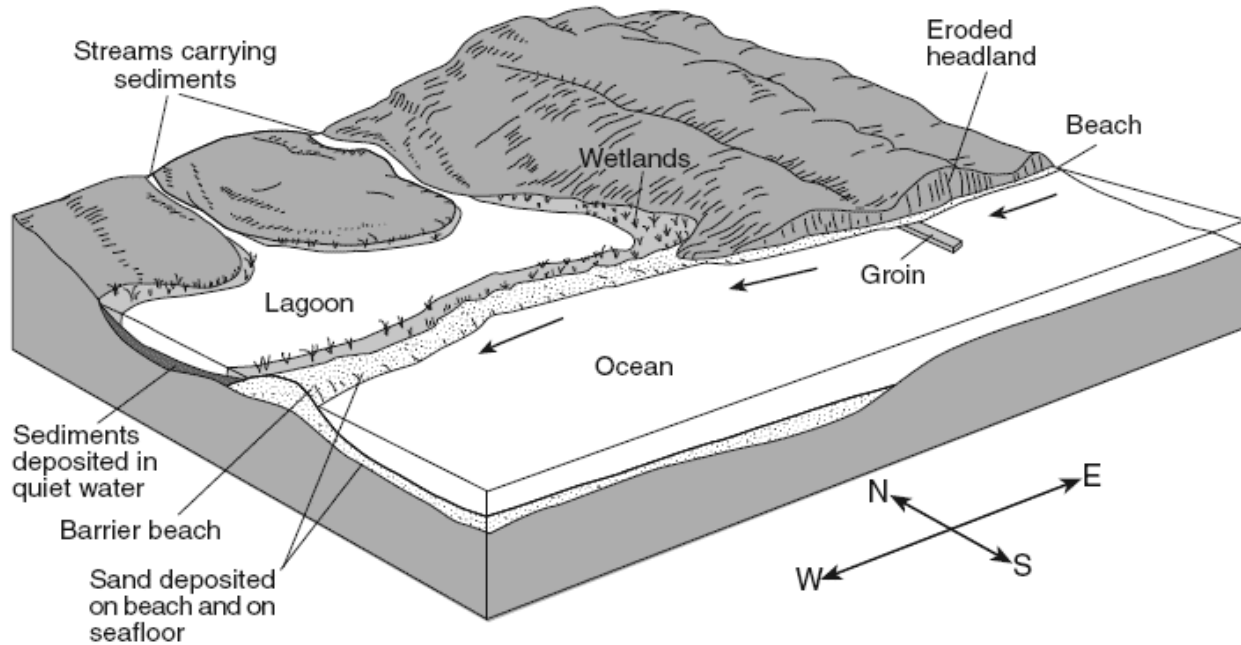


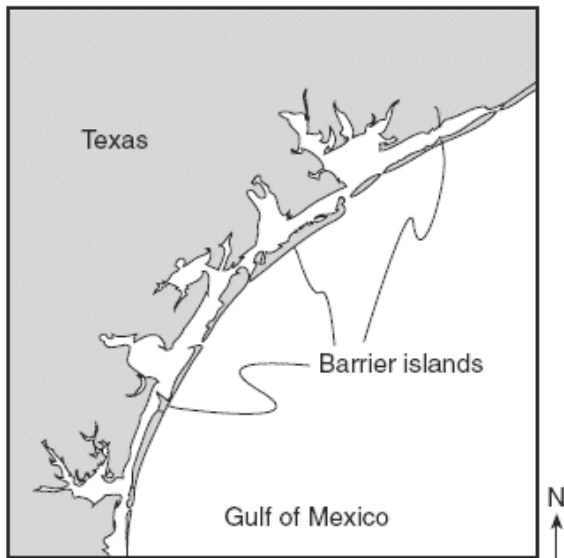
Figure 1

The groin structure will change the pattern of deposition along the shoreline, initially causing the beach to become

1. wider on the western side of the groin
2. wider on the eastern side of the groin
3. narrower on both sides of the groin
4. wider on both sides of the groin

2.

The map below shows barrier islands in the ocean along the coast of Texas.



Which agent of erosion most likely formed these barrier islands?

- | | |
|------------------|-------------|
| 1. mass movement | 3. streams |
| 2. wave action | 4. glaciers |
-

3.

Base your answer to the question on the map of Long Island, New York. *AB*, *CD*, *EF*, and *GH* are reference lines on the map.

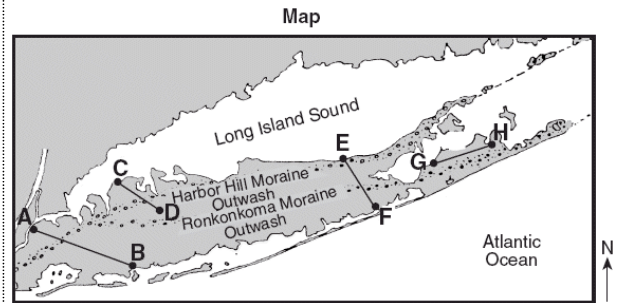


Figure 2

Which agent of erosion transported the sediments that formed the moraines shown on the map?

- | | |
|----------|------------------|
| 1. water | 3. ice |
| 2. wind | 4. mass movement |
-

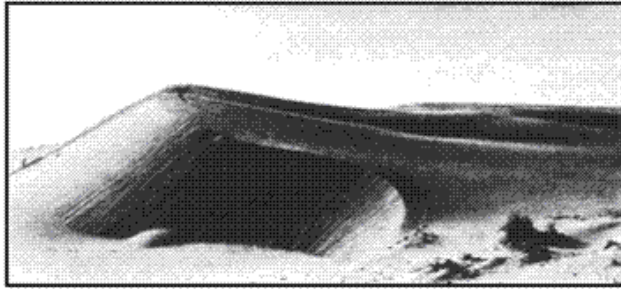
4.

Which agent of erosion was primarily responsible for forming the long, narrow, U-shaped valleys in the Finger Lakes region of New York State?

- | | |
|---------------|-------------------------|
| 1. wind | 3. meandering streams |
| 2. landslides | 4. continental glaciers |
-

5.

The photograph below shows a sand dune that formed in a coastal area.



This sand dune was most likely formed by

1. water flowing from the left
2. water flowing from the right
3. wind blowing from the left
4. wind blowing from the right

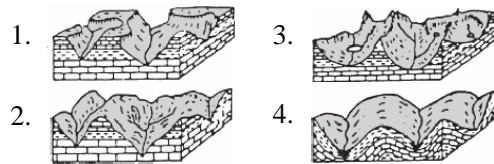
6.

Transported sediments are usually deposited at locations in which

1. the freeing and thawing of water occurs
2. the chemical breakdown of rocks occurs
3. a decrease in the speed of the agent of erosion occurs
4. an increase in the physical weathering of rocks occurs

7.

Which landscape surface resulted primarily from erosion by glaciers?



8.

The map shows Rockaway Peninsula, part of Long Island, New York's south shore.

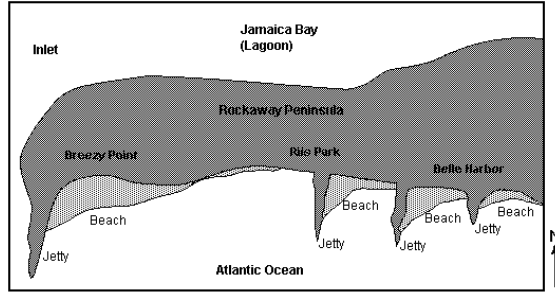


Figure 3

Toward which direction is sand being transported along the shoreline within the zone of breaking waves?

1. northeast
2. south
3. southeast
4. west

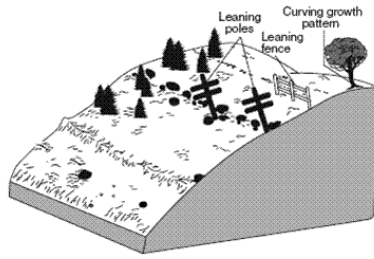
9.

The particles in a sand dune deposit are small and very well-sorted and have surface pits that give them a frosted appearance. This deposit most likely was transported by

1. ocean currents
2. glacial ice
3. gravity
4. wind

10.

The diagram below shows the surface features of a landscape.



Based on the features shown, which erosional agent had the greatest effect on tree growth and the structures that humans have built on this landscape?

- | | |
|------------------|--------------------|
| 1. running water | 3. prevailing wind |
| 2. moving ice | 4. mass movement |

11.

The occurrence of parallel scratches on bedrock in a U-shaped valley indicates that the area has most likely been eroded by

- | | |
|--------------|----------|
| 1. a glacier | 3. waves |
| 2. a stream | 4. wind |

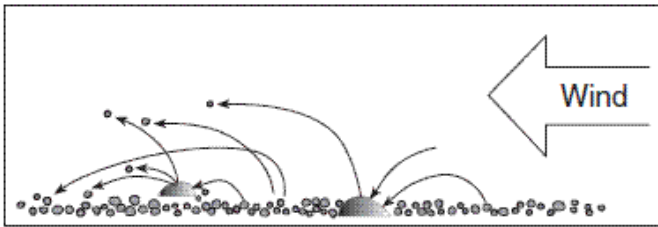
12.

Which statement best describes sediments deposited by glaciers and rivers?

1. Glacial deposits and river deposits are both sorted.
2. Glacial deposits are sorted, and river deposits are unsorted.
3. Glacial deposits are unsorted, and river deposits are sorted.
4. Glacial deposits and river deposits are both unsorted.

13.

The diagram below shows sand particles being moved by wind.



At which Earth surface locations is this process most likely to be observed as a major type of erosion?

1. deserts and beaches
2. deltas and floodplains
3. glaciers and moraines
4. mountain peaks and escarpments

14.

Base your answer to this question on the contour map below, which shows a hill formed by glacial deposition near Rochester, New York. Letters A through E are reference points. Elevations are in feet.

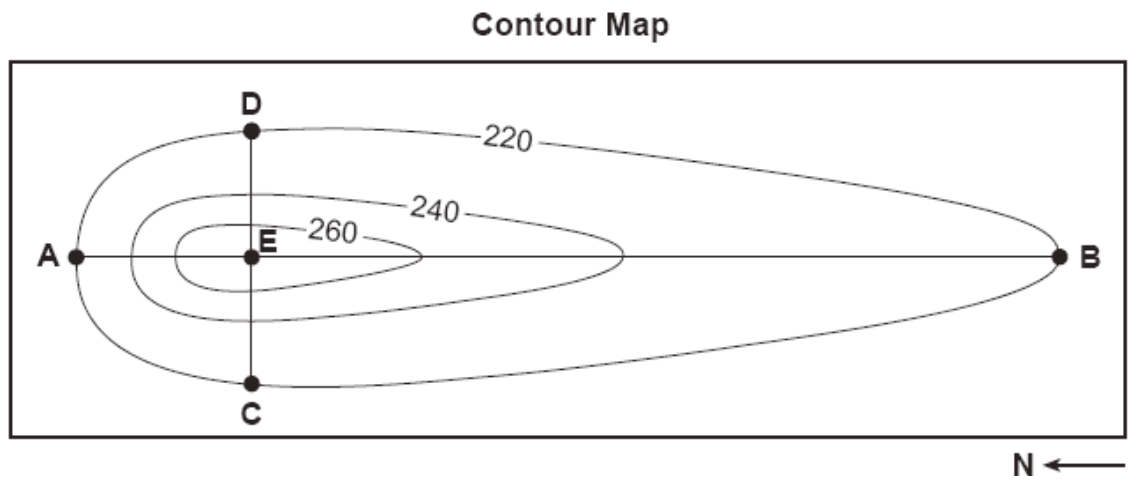


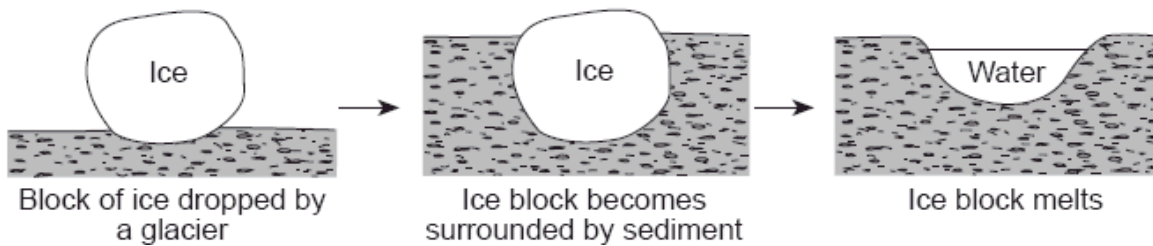
Figure 4

This glacial deposit is best identified as

- | | |
|----------------------|---------------------|
| 1. a U-shaped valley | 3. a drumlin |
| 2. a sand dune | 4. an outwash plain |

15.

The diagram below shows a glacial landscape feature forming over time from a melting block of ice.



This glacial landscape feature is best identified as

- | | |
|---------------------|------------------|
| 1. a kettle lake | 3. a finger lake |
| 2. an outwash plain | 4. a moraine |

16.

The photograph below shows farm buildings partially buried in silt.

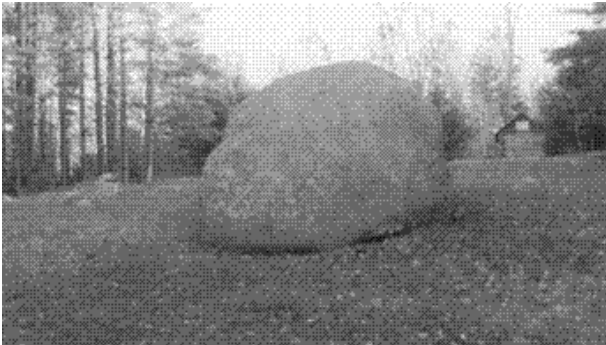


Which erosional agent most likely piled the silt against these buildings?

- | | |
|----------------|------------------|
| 1. glacial ice | 3. wind |
| 2. ocean waves | 4. mass movement |

17.

The photograph below shows a large boulder of metamorphic rock in a field in the Allegheny Plateau region of New York State.



The boulder was most likely moved to this location by:

- 1. glacial ice
- 2. prevailing wind
- 3. stream flow
- 4. volcanic action

18.

Base your answer to the question on your knowledge of earth science, the *Earth Science Reference Tables*, and the bar graphs below. The graphs show the percentages by volume of the sediment sizes that are found in four different sediment deposits, A, B, C, and D.

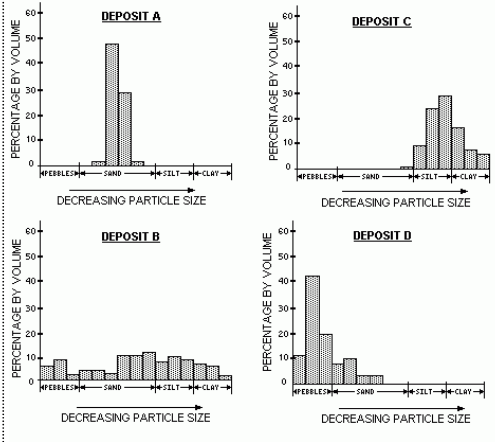


Figure 5

What was the most probable agent of erosion that deposited the unsorted sediments in deposit B?

- 1. a stream
- 2. a glacier
- 3. wind
- 4. ocean currents

19.

The general direction of continental glacial advance in the United States was generally from

- 1. south to north
- 2. north to south
- 3. west to east
- 4. east to west

20.

Which sediment is most easily picked up and transported by the wind?

- 1. cobbles
- 2. pebbles
- 3. sand
- 4. silt

21.

The direction of movement of a glacier is best indicated by the

1. elevation of erratics
2. alignment of grooves in bedrock
3. size of kettle lakes
4. amount of deposited sediments

22.

The photograph below shows a valley.



Which agent of erosion most likely produced this valley's shape?

1. wave action
2. moving ice
3. blowing wind
4. flowing water

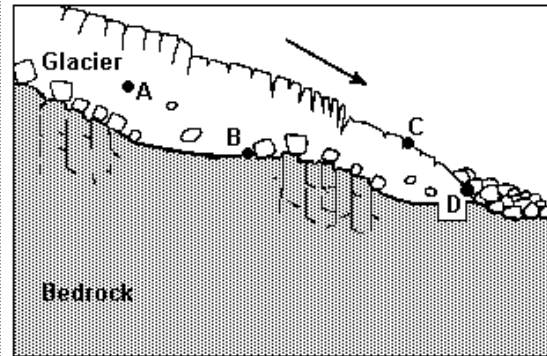
23.

What will be the most probable arrangement of rock particles deposited directly by a glacier?

1. sorted and layered
2. sorted and not layered
3. unsorted and layered
4. unsorted and not layered

24.

The cross section represents the transport of sediments by a glacier.



At which location is deposition most likely the dominant process?

1. A
2. B
3. C
4. D

25.

Which statement presents the best evidence that a boulder-sized rock is an erratic?

1. The boulder has a rounded shape.
2. The boulder is larger than surrounding rocks.
3. The boulder differs in composition from the underlying bedrock.
4. The boulder is located near potholes.

Answer Key for Erosion Part 2 Practice

1. 2	10. 4	19. 2
2. 2	11. 1	20. 4
3. 3	12. 3	21. 2
4. 4	13. 1	22. 2
5. 4	14. 3	23. 4
6. 3	15. 1	24. 4
7. 3	16. 3	25. 3
8. 4	17. 1	
9. 4	18. 2	