

Name: _____

Surface Processes

Date: _____ Period: _____

Earth Science

Packet: Mass Movement, Wind & Waves

CLASS NOTES

- Mass Movement - _____

- Characteristics: _____ sediment
- Examples: avalanches, landslides and/or mudslides
- Mass movement involves two forces:
 - Gravity - the force of attraction where objects fall towards the center of the Earth
 - Friction - the rubbing of one object against another
- When rain weakens the force of friction gravity then pulls rock and sediment down a slope

- Wind - _____

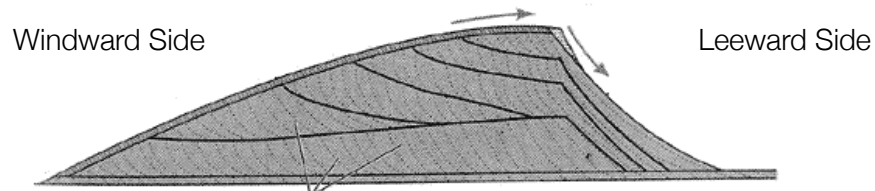
- Deflation - _____

- Abrasion - _____

- Sand Dune - _____

- Windward side: _____ slope

- Leeward side: _____ slope

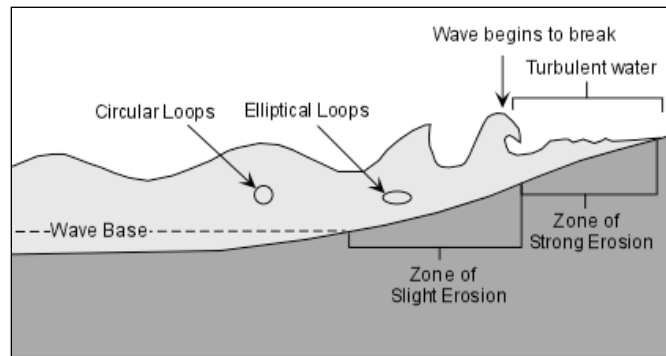


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- Waves - _____
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- Wave Formation:

- As wind pushes a wave towards the shore, it _____ along the ocean floor
- The dragging slows the bottom of the wave, but the top continues at the same speed
- Eventually the wave becomes _____ and “breaks”



- Waves approach the shore at an _____, but retreat _____ to the shore, creating a _____ pattern
 - Long Shore Current - _____
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PART I QUESTIONS: MULTIPLE CHOICE

1. 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
 - a. ocean currents
 - b. glacial ice
 - c. gravity
 - d. wind
2. The long, sandy islands along the south shore of Long Island are composed mostly of sand and rounded pebbles arranged in sorted layers. The agent of erosion that most likely shaped and sorted the sand and pebbles while transporting them to their island location was
 - a. glaciers
 - b. landslides
 - c. wind
 - d. oceans
3. Waves that erode the shore of Lake Ontario are caused primarily by
 - a. the rotation of the Earth
 - b. differences in temperature of lake water along the shore
 - c. winds blowing over the lake surface
 - d. density variations within the lake
4. Which natural agent of erosion is mainly responsible for the formation of the barrier islands along the southern coast of Long Island, New York?
 - a. mass movement
 - b. running water
 - c. prevailing winds
 - d. ocean waves
5. For which movement of earth materials is gravity not the main force?
 - a. sediment flowing in a river
 - b. boulders carried by a glacier
 - c. snow tumbling in an avalanche
 - d. moisture evaporating from an ocean
6. Wind erosion is most active in regions that have
 - a. a hot climate
 - b. much loose sediment
 - c. weak or non-resistant bedrock
 - d. bedrock exposed to the atmosphere