

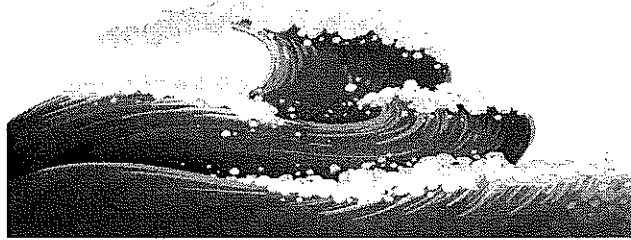
How do Ocean Waves Work?

(This Earth textbook p.222-226)

Name:

Date:

Block:



OCEAN WAVES:

Like running water, the ocean waves are agents of erosion, transportation, and sediment deposition.

1. Explain the following terms in your own words:

A) *Erosion*

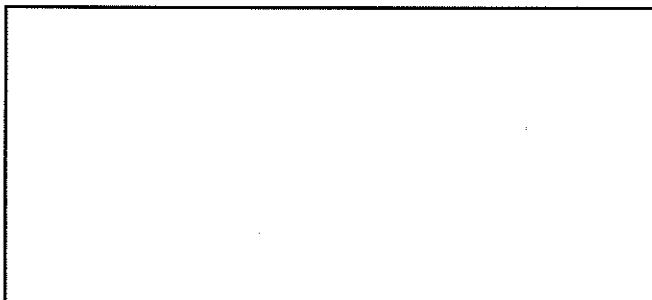
B) *Transportation*

C) *Sediment Deposition*

2. Explain how surface waves work.

3. What are the basic parts of a wave?

4. Draw a diagram to clearly illustrate the basic parts of a wave in the box below:



5. The height, length, and duration of a wave depend on what three factors:



6. What are the three types of *breaking waves*? Identify each by sketching each one in the box below and giving a brief explanation beside it.

WAVE REFRACTION:

1. What is wave refraction? Explain.

2. What is a *headland*? Explain.

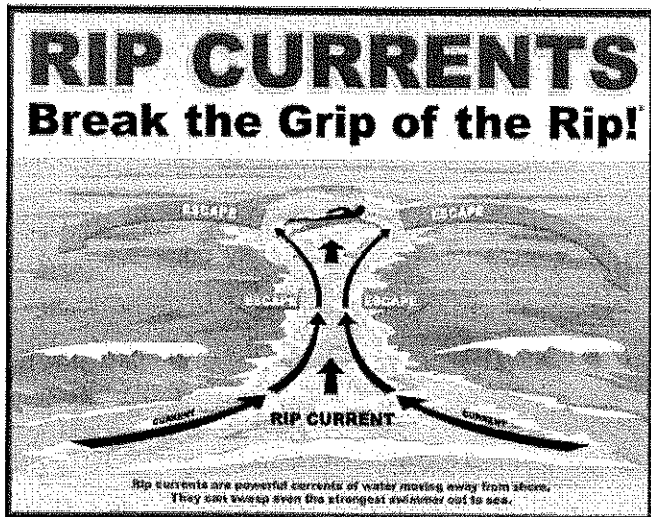
3. What impact does *wave refraction* have on irregular coastlines? Explain.

4. Explain *beach drift*.

5. Explain *longshore current*.

6. Explain *rip current*.

7. Examine the Rip Current safety poster image. Explain how to get out of the rip current if you are caught in one swimming.



WAVE EROSION:

1. What is *hydraulic pressure* and how does it contribute to shoreline erosion?

2. In your own words, explain shoreline recession.

3. Account for different landscapes created as a result of corrosion and abrasion.

4. Why are beaches often called "rivers of sand"? Explain.

5. If you were a novice surfer, what kind of breaking waves should you be looking for? Explain.

