Name: \_\_\_\_\_

Period: \_\_\_\_\_ Date: \_\_\_\_\_

## Chapter 20 Quiz Review: Tides, Waves, and Currents

## TIDES

1. What are tides?

- 2. How are tides produced? Be specific in your answer (mention sun, moon and Earth).
- 3. What is tidal range?
- 4. What is the difference between tidal current and flood current?



5. Compare spring to neap tides. Fill in the following table:

	Spring Tides	Neap Tides
Tidal Range		
Moon Phases		
Diagram		

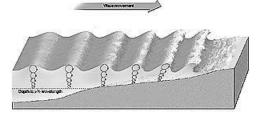
- 6. Where do the highest tides in the world occur?
- 7. What is a tidal bulge? What causes this?
- 8. How long is the SOLAR day? LUNAR day?
- 9. Tides are very long, slow waves. What is the wave period of tides (how long between two tides)?
- 10. What is the difference between diurnal and semi-diurnal tides? Which type of tides occur in North America?

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- 11. What is the difference between an apogee moon and a perigee moon? How does each one affect the tides?
- 12. Why are tides important? Give two reasons.

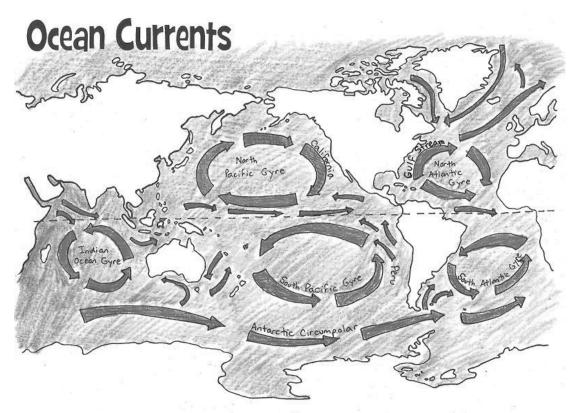
## WAVES

- 1. What are waves? What are they mostly caused by?
- 2. What are the 3 things that affect wave size?
- 3. How does water move in a wave?
- 4. Draw a regular wave and label it (*wavelength, wave height, crest, and trough*).
- 5. What happens to wave motion as you go deeper? Where do you stop feeling the motion of a wave?
- 6. What happens to waves in shallow water? Explain how a wave "crashes" on shore.
- 7. How do waves impact the coast?
- 8. How are waves important to organisms in the ocean? Give two reasons.
- 9. What is a tsunami? What is the main cause of tsunami?
- 10. What are some differences between regular waves and a tsunami?



1. What is a current?

- 2. What are surface currents generated by?
- 3. What is a gyre? Which gyre is on the Atlantic coast of North America? The Pacific coast of North America?
- 4. What is the Coriolis Effect? How does it affect what happens in the Northern and Southern Hemispheres?
- 5. Define longshore current. How are rip currents related to longshore currents?
- 6. What is a deep ocean current? What separates deep ocean currents from the surface?
- 7. Define upwelling. Why is upwelling important?



Layers of Learning