Textbook scavenger hunt:

The movement of ocean water

- I. What is an ocean current?
- 2. What factors influence currents?
- 3. What was Heyerdahl's theory and how did he prove it?
- 4. What is a surface current?
- 5. What three factors control surface currents?
- 6. How does a continent affect the movement of a surface current?
- 7. Explain the Coriolis effect. How does it change depending on your location?
- 8. What does it mean for something to be deflected?
- 9. What current most affects us in Georgia? Is it warm or cold?
- 10. What is a deep current? What causes them?
- II. Explain how temperature and density affect the formation of deep currents.
- 12. How do cold-water currents affect coastal regions?
- 13. Describe and illustrate (draw) and upwelling.
- 14. Why is the process of an upwelling important?
- 15. Why might the climate in Scotland be relatively mild even though the country is located at a high latitude?

- 16. Draw a wave. Label the four parts.
- 17. What are waves showing the movement of?
- 18. What is a wave period?
- 19. How do you calculate wave speed?
- 20. How do deep-water waves become shallow water waves?
- 21. What can the movement of water of a wave carry?
- 22. What is an undertow?
- 23. What causes a longshore current?
- 24. How is an undertow different from a longshore current?
- 25. What are whitecaps? How do they form?
- 26. What are swells? Compare them to whitecaps.
- 27. What is a tsunami? What causes it to form?
- 28. What is a storm surge? Why are storm surges difficult to study?
- 29. Explain the difference between a storm surge and a tsunami
- 30. What is a tide?
- 31. How does the moon affect Earth's particles?
- 32. What do bulges have to do with tides?
- 33. What are the two types of tides? Differentiate between them.
- 34. What is a tidal range?
- 35. Explain the difference between a spring tide and a neap tide.

 Draw the placement of Earth, moon, and Sun for each type.