**Video Study Guide: Earth Revealed
Episode 24: Waves, Beaches and Coasts**

Read the questions first. Then answer them while watching this episode of "Earth Revealed". If you miss it in class you are still responsible for the viewing this segment and answering the questions. The video is available online at <http://www.learner.org/vod/video.html?sid=78&po=24> . The index for these programs is online at [**http://www.learner.org/resources/series78.html#**](http://www.learner.org/resources/series78.html) . If you do not have an internet connection at home, view it after school or during study hall in the media center. Each segment is 30 minutes long.

1. Where do waves get their energy?
2. What is moving as a wave approached the coast?
3. Describe wave motion in detail.
4. What is wave base? How it is determined?
5. What happens when wave base intersects the seafloor? Describe in detail.
6. What is a tsunami? Describe in detail.
7. What is refraction?
8. How does refraction tend to even out an irregular coastline?
9. Describe how longshore currents transport sediments along the beach face.
10. Why do beaches change from season to season?
11. How do dams affect beach processes?
12. How does the moon affect the tides?
13. How does glacial activity affect sea level?
14. What is an eustatic sea level change?
15. What is the greenhouse effect?
16. How are the use of fossil fuels causing changes in earth's greenhouse levels?
17. What is the role of the geologist in the protection of the coastlines?