

Marine Science- Ocean Waves

go to: <http://www.montereyinstitute.org/noaa/>

Directions: Answer each of these questions as *statements with pictures* on your website

- 1: Explain the **movement of water molecules** *within a wave*
- 2: **What** do waves transmit across the sea?
- 3: Explain **wave anatomy** (*make sure to label all parts*)
- 4: What are most waves *generated by*? **Explain.**
- 5: **When** do waves reach their maximum size?
- 6: Where are the **largest waves** on earth found? *Why?*
- 7: What is a **wave train**? What happens when there is interference of wave trains?
- 8: What is a rogue wave? How are they created? How big can they get?
- 9: What happens to waves in **shallow water**? *Explain.*
- 10: What is **swash**? What does it do? How it is involved in *erosion*?
- 11: What is a **tsunami**? Explain how they are *different than wind generated waves*.
- 12: What are some of the *causes of tsunamis*? **Explain.**

Global Impact

- 1: How can we *generate electricity* from wave power? **Explain.**
- 2: **How much possible electricity** could wave power generate?
- 3: How many people have been killed by tsunamis?
- 4: What can be done about tsunamis to help protect people and property?

DO: Activities: Breaking Waves

Tsunami Warning Systems

- 1: Describe the different types of warning systems that are in place for tsunamis (*including animals, people and instincts*)

