

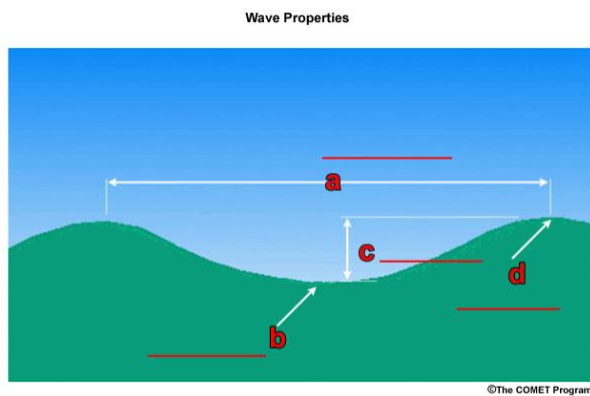
Worksheet 3: Teacher Version for Lessons:

- Wave Characteristics and Tsunamis
- Preparing for a Tsunami

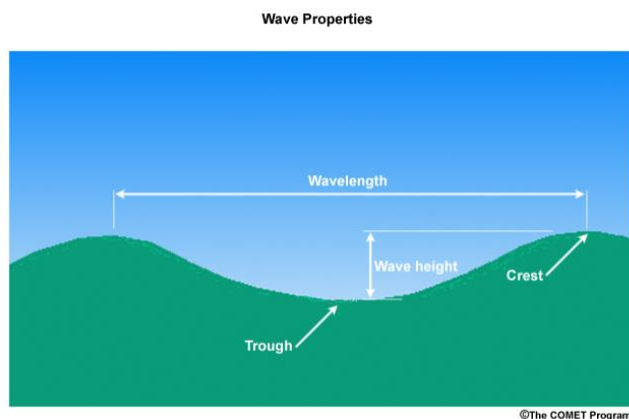
1a. The distance between two consecutive wave crests is called the _____.

Answer: wavelength

1b. Label the wavelength and other wave components in this diagram (a, b, c, & d mark each location to be labeled).



Answer (see labels on image below):



2. The time it takes a complete wave (from one trough or crest to the next) to pass a point is called the _____.

Answer: wave period

3. Which waves—wind waves or tsunamis—have a larger wavelength? _____

Answer: tsunamis

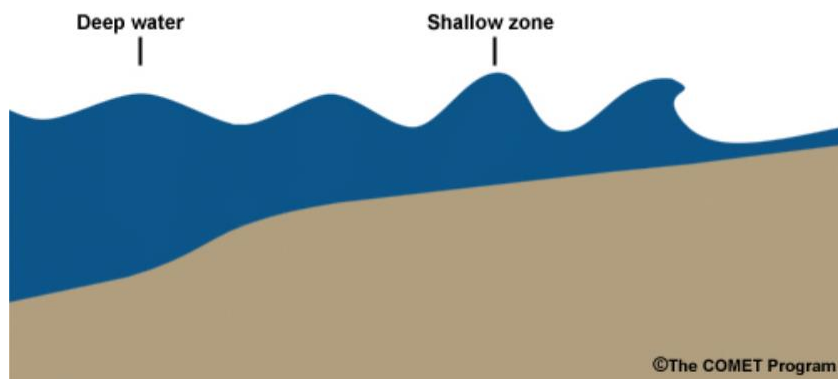
4. Which waves—wind waves or tsunamis—travel more quickly? _____

Answer: tsunamis

5a. In looking at the diagram below, what you can say about how wavelength and wave height change as a wave reaches shore? _____

Answer: Wavelength decreases, wave height increases.

Shallow Water Wave Properties



5b. What happens to the wave speed? _____

Answer: Wave speed decreases

6. **What should you do if you are at the beach and feel an earthquake?** Check the correct answers from the list shown here.

- ☐ a. Watch to see if the water recedes
- ☐ b. Get off the beach
- ☐ c. Listen for a siren
- ☐ d. Move to higher ground immediately
- ☐ e. Stay out of the water
- ☐ f. Wait to be evacuated
- ☐ g. Round up others in your vicinity and clear the beach

area. *Answer: The correct answers are b, d, e, and g.*

7. **List five items you should have in your emergency preparedness kit.**

Possible answers: flashlight, batteries, canned food, water, medicine/personal supplies, first aid kit, pet supplies, important papers, money/credit cards, cell phone, whistle, duct tape, tools, local maps, medications, baby supplies, disinfectant, fire extinguisher, disposable dishes and utensils, books or other entertainment

8. **True or false: Once a Tsunami Warning is cancelled, it is safe to go to the beach.** (Circle the correct answer.)

Answer: False (Do not approach the beach area until local officials give an "all clear".)

9. **True or false: A siren will always sound to signal that a tsunami is coming.** (Circle the correct answer.)

Answer: False. Not all locations have sirens.

10. **If you are in a low area next to the water, what is the minimum height you should climb to be sure you are safe from an incoming tsunami?**

- a. 2 meters
- b. 5 meters
- c. 10 meters
- d. 30 meters

Answer: d, 30 meters