



Among the several examples of waves discussed in this video will be ocean waves. Why do these waves "break" as they do? Stay tuned. Program note. At certain points during the video, approximations will be displayed. An approximation is written like an equation, but with an  $\approx$  instead of an  $=$ . Watch this symbol carefully when it appears. (You will not need to record the approximations that accompany the symbol.)

Read the following questions before the video begins. Answer them while the video is in progress. To complete this assignment successfully, you must listen carefully to the narration. Do not get distracted by the visual effects. Unless the instructor tells you otherwise, do not ask others for answers or copy answers from other people's sheets; doing so would be considered cheating.

The † indicates there are no questions for a while. Go ahead and watch the screen action for a while.

1. At the end of the 17th century, one state-of-the-art experiment was to measure...

2. Experimental physics (WAS NOT / WAS) one of Isaac Newton's strong points. (Circle one.)

3. What did Isaac Newton use as a timer in his experiment?

4. Professor Goodstein's wave machine is (GROOVIER THAN / NOT AS GROOVY AS) the Rio wave machine.

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5. When a particle in stable equilibrium is disturbed, nature's response is...

6. All waves that propagate through any medium are called...

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7. Which kind of wave travels at higher speeds in deep water, a short wavelength wave or a long wavelength wave?

8. Are water waves transverse or longitudinal?

9. When a wave approaches shore, which part travels faster, the thick section or the thin section?



10. Whose measured value for the speed of sound was better, Isaac Newton's or William Durham's?