

# CHAPTER REVIEW

# Chapter 17

## Waves

### I. Vocabulary Review

Use the clues to complete the puzzle.

1.																				
2.																				
3.																				
4.																				
5.																				
6.																				
7.																				

- 1. type of wave interference in which the crest of one wave meets the trough of another
- 2. the lowest part of a wave
- 3. the distance from crest or trough to the level of the undisturbed medium
- 4. the way the ear recognizes frequency
- 5. The medium vibrates in the same direction the wave travels.
- 6. the distance from crest to crest
- 7. the highest part of a wave
- 8. Use the word spelled out in the box to complete the following sentence: The change in pitch as a sound source moves relative to a receiver is called the \_\_\_\_\_ effect.

### II. Concept Review

If the underscored word or phrase makes the sentence true, write "TRUE" in the space provided. If the underscored word or phrase makes the sentence false, write the correct term or phrase in the space provided.

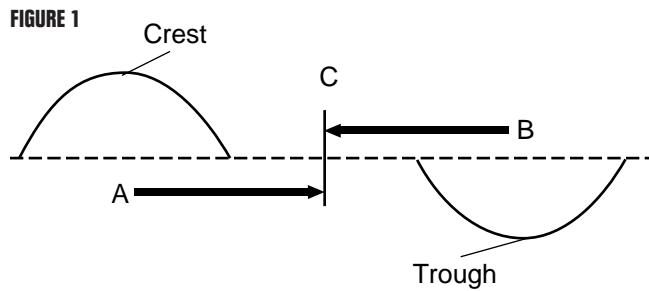
- \_\_\_\_\_ 9. In a longitudinal wave, the medium travels at right angles to the direction of the wave itself.
- \_\_\_\_\_ 10. The amplitude of a sound wave is the number of compressions that pass by a point in one second.
- \_\_\_\_\_ 11. In the same medium, wavelength increases as frequency decreases.
- \_\_\_\_\_ 12. When two wave crests meet, each having an amplitude of X, the new amplitude will be equal to 2X.
- \_\_\_\_\_ 13. As an ambulance moves away from you, the pitch of the siren will decrease because the sound waves will be compressed.

Answer the following questions in the spaces provided.

- 14. How are all waves made? \_\_\_\_\_

### Chapter Review 17 (continued)

15. The amplitude of waves A and B in Figure 1 is the same. Explain what happens when the crest of wave A meets the trough of wave B at point C. \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



16. Draw a wave and label its parts.

### III. Skills/Process Review

Answer the following questions in phrases or complete sentences.

17. In the Find Out! activity, you made a wave by having several students sit in a large circle and raise and lower their hands in a continuous motion. Using the data in the table below from a similar activity, calculate the speed of the wave. \_\_\_\_\_

Distance around the circle	36 meters
Time for a pulse to travel around the circle	12 seconds

18. In the table, what happens to the speed of the wave as the number of pulses increases? \_\_\_\_\_
- \_\_\_\_\_
19. In the table, what is the wavelength when three pulses are going around the circle, evenly spaced? Two pulses? \_\_\_\_\_
- \_\_\_\_\_

### IV. EYV Review

20. **Technology Connection: Wave Energy** What are some advantages of a wave-powered station?
- \_\_\_\_\_
- \_\_\_\_\_