

Waves and Energy

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- _____ 1. Waves transfer
a. energy and matter. c. matter only.
b. energy only. d. neither energy nor matter.
- _____ 2. Which of the following types of waves requires a medium?
a. visible light c. microwaves
b. X-rays d. sound waves
- _____ 3. Which of these waves do NOT require a medium?
a. ocean waves c. sound waves
b. seismic waves d. radio waves
- _____ 4. A section of a longitudinal wave where the particles are crowded together is called a
a. rarefaction. c. vibration.
b. compression. d. surface wave.
- _____ 5. Which waves can travel without a medium?
a. ocean waves c. sound waves
b. seismic (earthquake) waves d. radio waves
- _____ 6. Part of a longitudinal wave where the particles are spread apart is called is called a
a. rarefaction. c. vibration.
b. compression. d. surface wave.
- _____ 7. An example of a mechanical wave is a(n)
a. light wave. c. ocean wave.
b. radio wave. d. X ray.
- _____ 8. What disturbance sends energy through matter or empty space?
a. a wave c. a medium
b. a trough d. a crest
- _____ 9. Which one of these wave types must have a medium?
a. X-rays c. ocean waves
b. visible light d. microwaves

Completion

Complete each sentence or statement. You may use a term more than once.

longitudinal transverse trough electromagnetic

10. Microwaves, television and radio waves, and X rays are examples of electromagnetic waves.
11. The two main types of waves are _____ and _____ waves.
12. The lowest point between each crest of a transverse wave is called a _____.
13. All electromagnetic waves are _____ waves.
14. Waves in which the particles of the medium move in circles rather than up and down are called _____ waves.