Name Date Class

Directed Reading for Content Mastery

Section 2 ▪ Wave Properties
Section 3 ▪ Wave Behavior

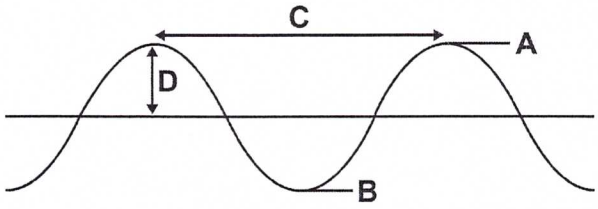
Directions: *Use the letters on the diagram to identify the parts of the wave listed below. Write the correct letters on the line provided.*

_____ **1.** crest

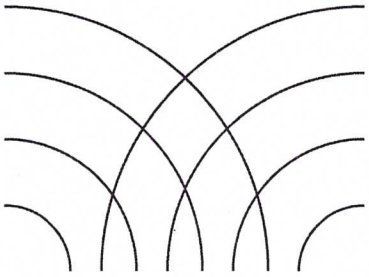
_____ **2.** amplitude

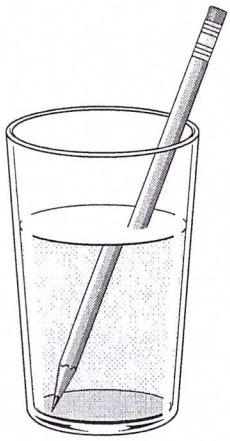
_____ **3.** wavelength

_____ **4.** trough



Directions: *Label the illustrations below as refraction or interference.*





5. _____ 6. _____

Directions: *Circle the term in parenthesis that makes each statement true.*

7. The number of wavelengths that pass a given point in 1s is the wave's (frequency/vibration).

8. The units of frequency are (hertz [Hz], newtons [N]).

9. Mechanical waves travel faster in (liquids/solids).

10. (Compression/Reflection), occurs when a wave strikes a surface and bounces off.

Meeting Individual Needs

Name _____ Date _____ Class _____

Chapter Review

Waves

Part A. Vocabulary Review

Directions: *Match the terms in Column II with the definitions in Column I. Write the letter of the correct term in the blank at the left.*

Column I

_____ **1.** Squeezing a group of particles in a wave

_____ **2.** A transverse or compressional wave that can travel only through matter

_____ **3.** The matter through which a wave transfers energy

_____ **4.** A wave bends around a barrier

_____ **5.** A mechanical wave in which matter moves at right angles to the wave direction

_____ **6.** A wave in which matter moves back and forth in the direction the wave is moving

_____ **7.** A wave that doesn't require matter to transfer energy

_____ **8.** A region of spread-out particles in a wave

_____ **9.** The distance from the crest or trough of a wave to the rest position

_____ **10.** The action of a wave bouncing off an object

_____ **11.** The number of waves passing a given point per second

_____ **12.** The product of wavelength and frequency

_____ **13.** A combination of waves form a smaller wave

_____ **14.** A combination of waves form a larger wave

_____ **15.** A rhythmic disturbance that carries energy

_____ **16.** A wave bends as it moves from one medium to another

_____ **17.** The distance between a point on a wave and the identical point on the next wave

Column II

a. amplitude

b. compression

c. compressional wave

d. diffraction

e. electromagnetic wave

f. frequency

g. constructive interference

h. destructive interference

i. mechanical wave

j. medium

k. wave speed

l. rarefaction

m. reflection

n. refraction

o. transverse wave

p. wave

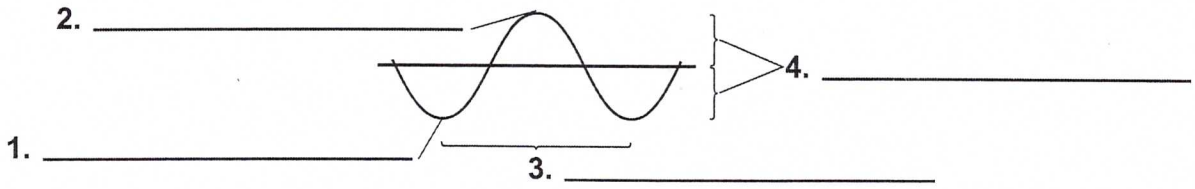
q. wavelength

Assessment

Chapter Review (continued)

Part B. Concept Review

Directions: *Study the following diagram. Then label the wave using the terms from the list.*



amplitude **crest** **trough** **wavelength**

Directions: *Complete the following sentences using the correct terms.*

5. Waves are _____ if they bounce off a surface.
6. Mechanical waves can be transverse or _____ waves.
7. The property of waves that allows them to bend around a barrier is _____.
8. Waves may bend if they move from one _____ to another.
9. Waves do not carry matter, but they do carry _____.
10. Wavelength, frequency, amplitude, and _____ are four characteristics of waves that can change.
11. In visible light, color is an indication of _____.
12. The common name for the reflection of sound waves is an _____.
13. In a compressional wave, one wavelength is the distance between adjacent compressions or adjacent _____.
14. Light waves travel more _____ as they enter water.
15. When light is reflected from a rough surface, the reflected light _____, producing no image.
16. Waves _____ best when their wavelength is similar in size to the opening they are moving through.

Directions: *Answer the following question using complete sentences.*

17. Explain how the destructive interference of sound waves can help preserve hearing.

_____

_____

_____

Assessment