



Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

1

A boat is anchored at sea. What does the **up and down** motion of the boat show?



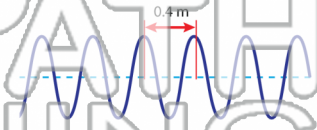
- A The molecules of water only move up and down while the energy moves forward.
- B The ocean is standing still.
- C The boat's motor is on.
- D The molecules of water move side to side while the energy moves forward.

2

What is the **frequency** of a wave with a **speed of 20 m/s** and a **wavelength of 0.4 m**?

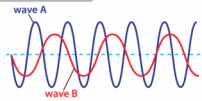
**wave speed = wavelength x frequency**

- A 8 Hz
- B 0.2 Hz
- C 50 Hz
- D 20.4 Hz



3

Which statement about **wave A** and **wave B** is **correct**?



4

Speed of sound changes due to the medium in which sound waves travel. Based on this chart, what is the **overall trend** from the **slowest to the fastest** medium?

5



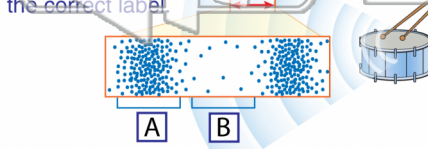
## PREVIEW

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7

actually **softer** than it is a few seats forward. Which **wave interaction** explains this problem?

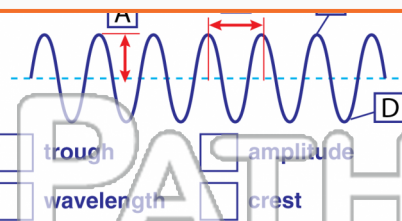
- A reflection
- B interference
- C diffraction
- D refraction



10

Match the term with the correct definition.

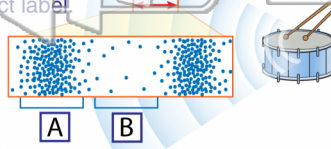
- music      A. sound that produces pleasing patterns
- overtones      B. distinct sound of an instrument
- resonance      C. natural vibrational frequency
- quality of sound



9

Match the term with the correct label.


- compression
- rarefaction
- wavelength





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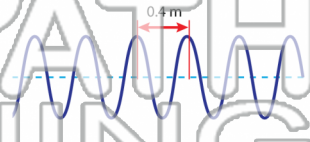


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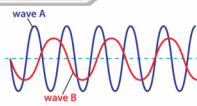
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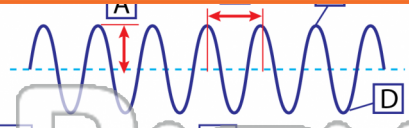


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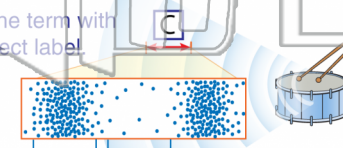


8 Match the term with the correct definition.



trough       amplitude  
 wavelength       crest

9 Match the term with the correct label.



compression       wavelength  
 rarefaction

10 Match the term with the correct definition.

music      A. sound that produces pleasing patterns  
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