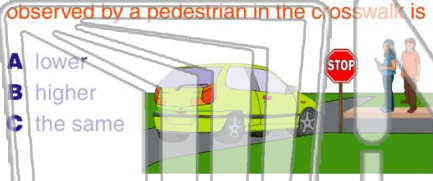Name_____ Class_____ Date_____

1 The driver of a car blows the horn as the car approaches a crosswalk. Compared to the **actual pitch** of the horn, the **pitch** observed by a pedestrian in the crosswalk is
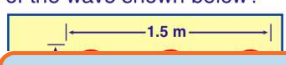
A lower
B higher
C the same

2 What **type** of **wave** is **sound** traveling in water?
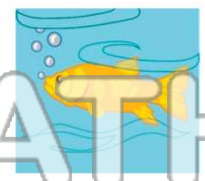
A torsional
B transverse
C elliptical
D longitudinal

3 What are the **amplitude** and **wavelength** of the wave shown below?
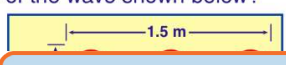
|← 1.5 m →|

4 An opera singer's voice is able to break a thin crystal glass when the **singer's voice** and the **vibrating glass** have the **same**

5

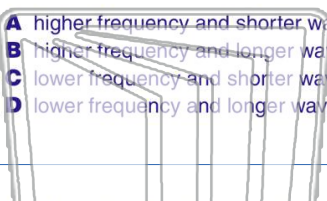**PREVIEW**

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7 medium. Compared to the frequency and wavelength of the **emitted sound**, the **observer** would detect waves with a

A higher frequency and shorter wavelength
B higher frequency and longer wavelength
C lower frequency and shorter wavelength
D lower frequency and longer wavelength

The **frequency** of these waves is

A 0.20 Hz
B 5.0 Hz
C 16 Hz
D 80 Hz

9 An electric guitar is generating a sound of **constant frequency**. An increase in which sound wave characteristic would result in an increase in **loudness**?
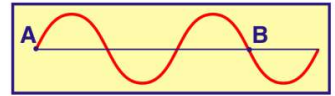
A speed
B period
C wavelength
D amplitude

10 The diagram below shows two points, *A* and *B*, on a wave train.

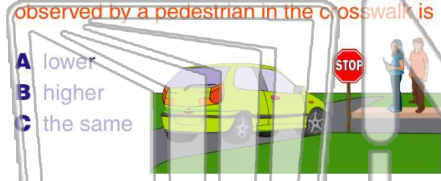How many wavelengths **separate** point *A* and point *B*?

A 1.0
B 1.5
C 3.0
D 0.75

Name_____ Class_____ Date_____

1 The driver of a car blows the horn as the car approaches a crosswalk. Compared to the **actual pitch** of the horn, the **pitch** observed by a pedestrian in the crosswalk is

A lower
B higher
C the same

B

2 What **type of wave** is **sound** traveling in water?

A torsional
B transverse
C elliptical
D longitudinal

D

3 What are the **amplitude** and **wavelength** of the wave shown below?

|← 1.5 m →|

4 An opera singer's voice is able to break a thin crystal glass when the **singer's voice** and the **vibrating glass** have the **same**

A

5

D

PREVIEW

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7 medium. Compared to the frequency and wavelength of the **emitted sound**, the **observer** would detect waves with a

A higher frequency and shorter wavelength
B higher frequency and longer wavelength
C lower frequency and shorter wavelength
D lower frequency and longer wavelength

A

The **frequency** of these waves is
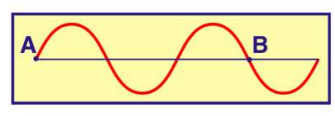
A 0.20 Hz
B 5.0 Hz
C 16 Hz
D 80 Hz

A

9 An electric guitar is generating a sound of **constant frequency**. An increase in which sound wave characteristic would result in an **increase in loudness**?

A speed
B period
C wavelength
D amplitude

D

10 The diagram below shows two points, A and B, on a wave train.

How many wavelengths **separate** point A and point B?

A 1.0
B 1.5
C 3.0
D 0.75

A   B

B