

Wave Parameters

⚠ This is a preview of the published version of the quiz

Started: Jul 12 at 1:09am

Quiz Instructions

Lesson 1 for 4/20 to 4/23

Instructions:

Watch the two videos about wave properties and complete the quiz questions. You can watch the videos within Canvas without downloading the mp4 files; just click the play button.

Video Lessons:

[Vibrations and Waves Energy and Motion - Video Lesson Transcript Studycom.mp4](#)

[Wave Parameters Wavelength Amplitude Period Frequency Speed - Video Lesson Transcript Studycom.mp4](#)

Question 1

1 pts

What are vibrations?

- None of these
- oscillating motions around a fixed position
- the capacity to gain speed within a short time.
- Total length traveled without regard to direction. It is a scalar.

- any interaction that, when unopposed, will change the motion of an object.

Question 2

1 pts

Which of the following are examples of vibrations occurring?

- Cymbal being struck.
- Ground shaking during an earthquake.
- A trampoline being jumped upon.
- All of these are examples of vibrations occurring.
- Guitar string being plucked.

Question 3

1 pts

What are waves?

- None of these
- A disturbance that travels through a medium from one place to another.
- any interaction that, when unopposed, will change the motion of an object
- a vehicle's capacity to gain speed within a short time.
- Total length traveled without regard to direction. It is a scalar.

Question 4

1 pts

If you plot the position change of a mass oscillating up and down on a spring as a function of time, the movement is _____.

- Periodic
- A Wave.
- A saw tooth pattern.
- Completely Random

Question 5

1 pts

Waves are caused by some type of vibration.

- True
- False

Question 6

1 pts

Low points on the graph of wave displacement as a function of time are called

_____.

- peaks
- None of these
- troughs
- crests
- wavelength
- speed
- frequency

Question 7**1 pts**

High points on the graph of wave displacement as a function of time are called

_____.

- Period
- Troughs
- Crests
- Frequency
- Wave Cycle
- None of these

Question 8**1 pts**

What is a wave cycle?

- The velocity of an object at a particular moment in time.
- Displacement divided by time.
- Total distance divided by total time.
- The portion of the wave between two successive crests, or between two troughs.
- None of these.
- The number of wave cycles that occur per unit time.

Question 9**1 pts**

What is amplitude?

- The capacity to gain speed within a short time.
- The number of wave cycles that occur per unit time.
- The capacity to do work.
- E. Total length traveled without regard to direction.
- None of these.
- The distance between the midline of a wave and its crest or trough.

Question 10

1 pts

Amplitude indicates how much _____ a wave is carrying.

- Heat.
- Speed.
- None of these.
- Force.
- Energy

Question 11

1 pts

Waves transfer matter from one place to another.

- True
- False

Question 12

1 pts

Waves transfer energy from one place to another.

- True
- False

Question 13

1 pts

What are wave parameters?

- A basic unit of matter that consists of a dense central nucleus surrounded by a cloud of negatively charged electrons.
- None of these.
- The theoretical lowest possible temperature
- The ways in which we measures waves.
- The sum total of protons (or electrons) and neutrons within an atom.
- Is the time rate of change of angular velocity

Question 14

1 pts

What is the period of a wave?

- The time is takes a wave to complete one wave cycle.
- The distance between the midline of a wave and its crest or trough.
- The number of wave cycles that occur per unit time.
- The distance the wave travels in a certain amount of time.
- None of these.

Question 15**1 pts**

What is wave speed?

- The number of wave cycles that occur per unit time.
- None of these.
- The distance between the midline of a wave and its crest or trough.
- The distance the wave travels in a certain amount of time.
- The time it takes a wave to complete one wave cycle.

Question 16**1 pts**

What is the frequency of a wave?

- The distance between the midline of a wave and its crest or trough.
- The time it takes a wave to complete one wave cycle.
- None of these.
- The distance the wave travels in a certain amount of time.
- The number of wave cycles that occur per unit time.

Question 17**1 pts**

What is the symbol for period?

- v
- c

None of these

T

Lambda

f

A

Question 18

1 pts

What is the symbol for frequency?

A

T

c

f

Lambda

v

Question 19

1 pts

What is the unit Hertz (aka Hz)?

Cycles per hour

Hours per cycle

None of these.

Cycles per second

Seconds per cycle

Question 20**1 pts**

Frequency is the reciprocal of the period.

- True
- False

Question 21**1 pts**

Increasing the period of a wave will also increase the frequency.

- True
- False

Question 22**1 pts**

The period and frequency are inversely proportional to one another.

- True
- False

Question 23**1 pts**

What is the symbol for amplitude?

A

f

T

c

Lambda

v

Question 24

1 pts

The larger the amplitude of a wave the faster it travels.

True

False

Question 25

1 pts

What is wavelength?

The number of wave cycles that occur per unit time.

Distance per cycle.

The distance the wave travels in a certain amount of time.

The time it takes a wave to complete one wave cycle.

None of these.

The distance between the midline of a wave and its crest or trough.

Question 26**1 pts**

What is the symbol for wavelength?

- T
- v
- Lambda
- c
- f

Question 27**1 pts**

What is the symbol for wave velocity?

- v
- None of these.
- f
- Lambda
- T

Question 28**1 pts**

Wave Speed = (Wavelength) x (Frequency)

- True
- False

Question 29**1 pts**

Which of the following parameters describe waves?

- Frequency
- All of these are parameters that describe waves.
- Wavelength
- Period
- Amplitude
- Wave Speed

Question 30**1 pts**

Wave amplitude affects the speed of a wave.

- True
- False

Not saved

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