

Transverse & Longitudinal Waves

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

Started: Jul 12 at 1:08am

Quiz Instructions

Lesson 2 for 4/20 to 4/23

Instructions:

Watch the video and answer the quiz questions.

Lesson Video:

[Transverse Longitudinal Waves Definition Examples - Video Lesson Transcript Studycom.mp4](#)

Question 1

1 pts

A mechanical wave is disturbance that travels through a medium.

- True
- False

Question 2

1 pts

A medium is the material in which a wave travels.

- True
- False

Question 3**1 pts**

What happens to particles in a transverse wave?

- Particles move in a direction transverse (aka perpendicular) to the direction in which the wave travels.
- Particles in the medium move in a direction transverse (aka perpendicular) to the direction in which the wave travels.
- None of these.
- Particles in the medium move in completely random directions.

Question 4**1 pts**

Mechanical waves can only be transverse.

- True
- False

Question 5**1 pts**

Mechanical waves can only be longitudinal.

- True
- False

Question 6**1 pts**

Mechanical waves can either be longitudinal or transverse.

- True
- False

Question 7**1 pts**

What happens to particles in a longitudinal wave?

- None of these.
- Particles in the medium move in a direction transverse (aka perpendicular) to the direction in which the wave travels.
- Particles of the medium move parallel to the direction in which the wave travels.
- Particles in the medium move in completely random directions.

Question 8**1 pts**

Mechanical waves can travel in a vacuum (aka a space with no medium).

- True
- False

Question 9**1 pts**

Transverse waves have compressions and rarefractions.

- True
- False

Question 10

1 pts

A compression is where the density of the wave medium is the highest.

- True
- False

Question 11

1 pts

A rarefaction is where the density of the wave medium is the lowest.

- True
- False

Question 12

1 pts

The wavelength of a longitudinal wave is the distance between compressions.

- True
- False

Question 13**1 pts**

The wavelength of a longitudinal wave is the distance between rarefactions.

- True
- False

Question 14**1 pts**

Through which of the following can mechanical transverse waves travel?

Choose all that apply.

- Plasma
- Gases
- Liquids
- Solids
- Vacuums (aka no air)

Question 15**1 pts**

Through which of the following can mechanical longitudinal waves travel?

Choose all that apply.

- Plasmas
- Gases
- Liquids

Solids

Vacuum (aka no air)

Question 16

1 pts

In order for transverse waves to occur, the medium must be composed of particles that are strongly joined with one another.

True

False

Question 17

1 pts

Longitudinal earthquake waves are called 'S' waves.

True

False

Question 18

1 pts

Transverse earthquake waves are called 'P' waves.

True

False

Question 19

1 pts

Scientist discover the earth has a partially liquid core because _____.

Choose all that apply.

- S waves did not travel through the earth.
- P waves traveled through the earth.
- P waves did not travel through the earth.
- P and S waves traveled through the earth.
- None of these. The earth does not have a partially liquid core.
- S waves traveled through the earth.
- P and S waves both did not travel through the earth.

Question 20

1 pts

The two major categories of waves are transverse and longitudinal.

- True
- False

Quiz saved at 1:08am

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