

WAVE MOTION

I. Directions: Answer the following questions

1. T or F All waves can transfer energy from one place to another without transferring any matter.

True

False

2. How do waves transfer energy from one place to another without transferring matter?

A series of light particles that carry energy a series of disturbances that carry energy

3. Waves can transfer energy through which of the following:



Solids



liquids



gasses



empty spaces

ALL OF THE ABOVE

4. What is another name for empty spaces?

Vacuum

mop

broom

5. The four different properties of waves include _____, wavelength, period, amplitude

Mass

matter

frequency

none of the above

II. Directions: Drag and drop

Distance from the maximum disturbance to the undisturbed position	LAMDA = λ	Distance between a point on one wave and the same point on the next wave	Refers to how often something happens
Measured in meters	The # of complete waves passing a fixed point in a given amount of time	Time for one complete cycle	Given the symbol "F"
Measured in units called Hertz	The time it takes to happen		Measured in seconds

FREQUENCY

PERIOD

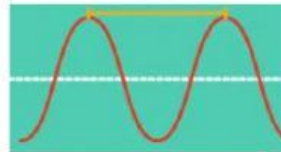
WAVELENGTH

AMPLITUDE

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III. Directions: Matching

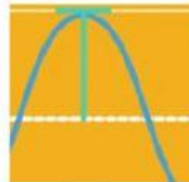
Hertz (Hz)



Frequency

Symbol for wavelength

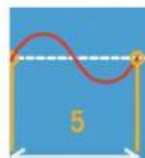
period



wavelength

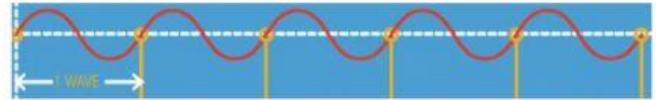
Measures how many complete cycles per second

LAMBDA (λ)



0.2 seconds

amplitude



III. Directions: choose the correct answer

QUESTION i

What are these called?

- 1.
- 2.
- 3.

What is the frequency?

Frequency = Hz

The diagram shows two wave graphs. The top graph is labeled 'DISTANCE (m)' and has a red vertical dashed line on the left. A green horizontal line labeled '1.' indicates the amplitude from the equilibrium line to a peak. A red horizontal line labeled '2.' indicates the wavelength between two peaks. The bottom graph is labeled 'TIME (t)' and has a red vertical dashed line on the left. A pink horizontal line labeled '3.' indicates the period between two peaks. A '1 SECOND' label is at the bottom. A 'fure' logo is in the bottom right corner.