

Item: _____

Reading Guide: Characteristics of Waves

Name: _____

1. There are two types of mechanical waves: 1) _____
(_____) and 2) _____.

2. In _____ waves, the _____ move in a direction _____ to the direction in which the wave travels.

Example of longitudinal wave from your investigation: _____

3. _____ waves are _____ waves.

4. The waves that you made with the _____ are _____ waves.
_____ waves have vibrations that are _____ or _____ to the direction in which the waves travels.

5. _____ waves are _____ waves.

6. Both waves transfer _____. The wave carries _____ through a _____, and the energy is _____ to whatever the wave touches.

7. Waves transfer _____ but does not transfer _____.

8. After a wave passes through a _____, the _____ returns to where it was before the wave passed.

9. Define amplitude for both types of waves:

transverse wave

longitudinal wave

10. Draw what a transverse wave looks like below and label:

11. Draw what a longitudinal (compressional) wave below and label:

12. Define the following (do NOT write the definitions in blue boxes, use your own words/words from the paragraphs):

Crest

Trough

wavelength

compressions

13. The _____ of the wave is the number of _____ each second.
14. Scientists measure _____ in _____.
15. The point of the _____ movement away from the _____ position is called the _____ of a wave. In a _____ wave the amplitude is the _____ of the _____. In a _____ wave, amplitude is measure of how _____ the compressions are. The amplitude of a wave is a measure of _____ is used to produce the wave.
16. The _____ of a wave is measured the same way the speed of _____. Often wave speeds are given in _____ per _____ (m/s).
17. Waves tend to travel at _____ speed through a medium.
18. Reflection means to _____ from a hard surface. Because waves carry _____, when a wave _____ back, the _____ in the wave is also _____.

Stop and Think Questions:

1)

2)

3)

Using index cards, DRAW a picture example of each of the following words then on the BACK of each card you will write the word and its description/definition.

Example of the card:

FRONT of index card

BACK of index card

PICTURE	WORD DEFINITION/DESCRIPTION
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Words to use: longitudinal (compressional) wave, transverse wave, amplitude, crest, trough, wavelength, compressions, frequency, reflection