

PROPERTIES OF WAVES

A wave is caused when a disturbance forces energy to travel out from the source.

A _____ wave is a wave where the molecules vibrate perpendicular to the direction of the energy of the wave.

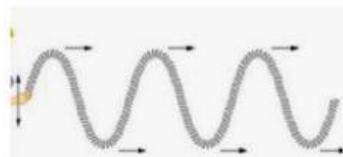
A _____ wave is a wave where the molecules vibrate parallel to the direction of the energy of the wave.

Drag and drop the labels on to the correct diagram.

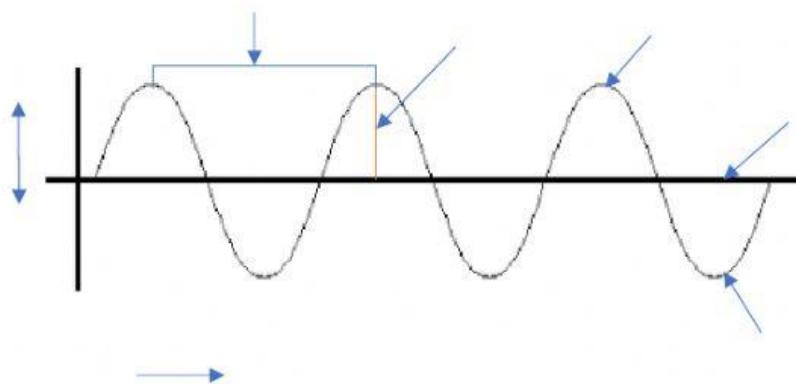
Transverse Wave



Compressional Wave



Drag and drop the labels on to the diagrams to identify the parts of the waves.



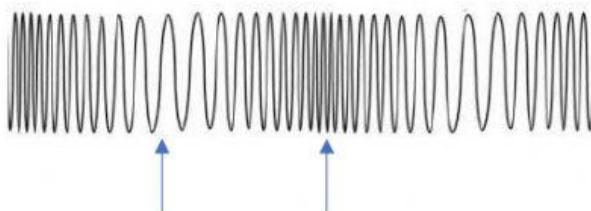
Particle vibration

Amplitude

Direction of Energy

Crest

Rarefaction



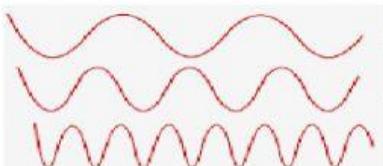
Trough

Compression

Wavelength

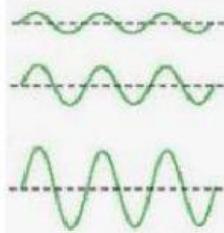
Equilibrium

Which wave below would have a higher frequency?



Why?

Which wave below is carrying more energy?



How do you know?

Wavelength and frequency are _____ . Meaning that as the wavelength increases (lengthens), the frequency _____ .

If you were to create a bigger disturbance, the amount of energy in the wave would _____ and the amplitude of the wave would _____ .

Which would create a wave with a larger amplitude?



The duck bobs up and down as the wave passes because