

Directions: Use the word bank to answer the following questions below. Each word will be used only ONCE.

CREST	VISIBLE LIGHT	LONGITUDINAL	RADIO	GAMMA
TROUGH	FREQUENCY	AMPLITUDE	ULTRAVIOLET	X-RAY
WAVELENGTH	TRANSVERSE	MECHANICAL	INFRARED	

1. The shorter the wavelength between waves, the higher its _____.
2. _____ waves NEED molecules in order to transfer the energy.
3. The _____ is the bottom part of a transverse wave.
4. _____ is the distance between one point of a wave to the same point in the next wave.
5. _____ waves have the highest frequency and carry the most energy.
6. _____ waves are a type of energy that can penetrate materials and get a picture of what is located inside. These are used by doctors and security at airports.
7. The motion of a wave that disturbs the medium at right angles (up & down) is called a _____ wave.
8. The _____ is the top of a transverse wave.
9. _____ waves are the ONLY energy frequencies humans can see.
10. The _____ of a transverse wave determines amount of energy at one time.
11. _____ waves (heat) have a wavelength just larger than the color red.
12. _____ waves (cause skin burn) have a wavelength just shorter than the color violet.
13. The wave that has the longest wavelength and lowest frequency is _____ waves.
14. _____ waves occur when the motion of the medium being disturbed is parallel to the direction of the wave (back and forth motion).

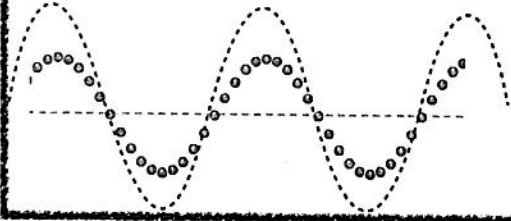
Name: _____

Date: _____

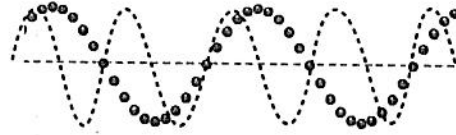
Change the Wave!

Examples:

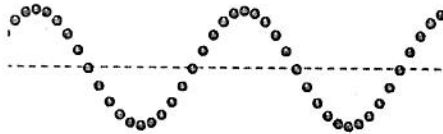
A. Increase the amplitude:



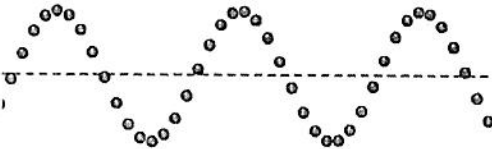
B. Increase the frequency:



1. Decrease the amplitude:



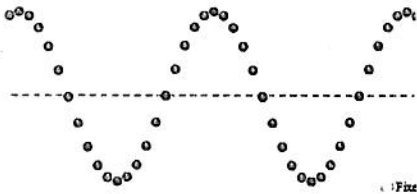
2. Decrease the frequency:



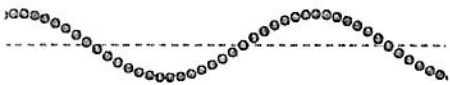
3. Increase the amplitude:



4. Decrease the amplitude:

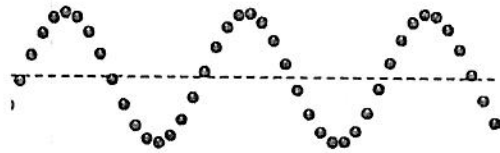


5. Increase the frequency:



Your Turn!

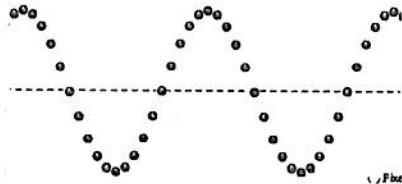
6. Increase the frequency:



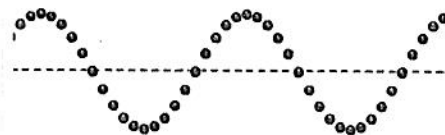
7. Decrease the amplitude:



8. Increase the amplitude:



9. Decrease the frequency:



10. Increase the frequency:

