

Name: _____

Integrated Science I Worksheet: Waves-2

20 Pts.

1. The line below has a scale 1 inch between each has mark. Draw a wave that has a wavelength of 2 inches and repeat this period 3 times. Your wave should start and end on the line. Label the crest, trough, and amplitude of your wave.



2. A wave vibrates 40 times per second and has a wavelength of 0.5mm. What is the ...

frequency: _____ use proper units!

wavelength: _____ use proper units!

Period: _____ use proper units!

speed of the wave: _____ use proper units!

3. A wave's frequency increases by 3 times. How does the wavelength change? _____
4. A waves frequency increases by 10 times. How does the period change? _____
5. X-rays have a much shorter wavelength than microwaves. Which has the higher frequency? _____
6. A ship sends a sonar signal to the bottom of the ocean floor. The signal travel 1320m/s. It takes 8 seconds for the signal to return to the ship. How deep is the ocean? _____
7. How does the angle of incidence compare to the angle of reflection?

Vocabulary Terms:

Place the number before the term

_____ amplitude

_____ beats

_____ bow wave

_____ Doppler effect

_____ forced vibration

_____ frequency

_____ hertz

_____ interference

_____ longitudinal wave

_____ natural frequency

_____ period

_____ refraction

_____ resonance

_____ shock wave

_____ sonic boom

_____ standing wave

_____ transverse wave

_____ wave

_____ wave speed

_____ wavelength