

STUDENT HOMEWORK: Lesson TWO – The Wave Equation

Name _____
Class _____

- 1) Can you fill in the blanks?

Speed = _____ x _____

- 2) Can you match the terms to their correct symbols?

Wavelength	v
Speed	f
Frequency	λ

- 3) Write out this list in ascending order for how fast you think sound will travel through them:

Water, Steel, Helium, Wood, Air, Custard

Fast
|
|
\
Slow

- 4) What is the speed of a wave with a wavelength of 2m and a frequency of 800Hz?
- 5) What is the wavelength of a sound wave with a frequency of 800Hz? (Speed = 330 m/s)
- 6) A sound wave travels through the sea with a wavelength of 1.5m and a frequency of 1000Hz. What speed is the wave travelling at?
- 7) A sound wave passes through a solid wall. It has a wavelength of 0.1m and travels at 2000m/s. What is its frequency?