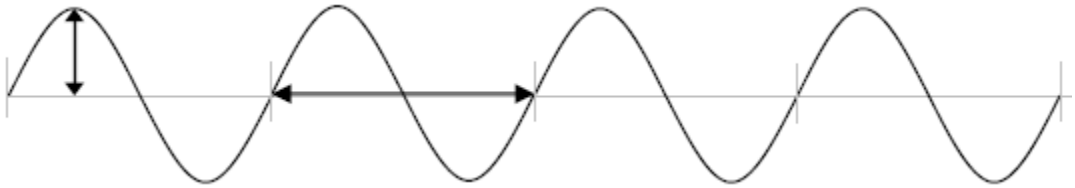
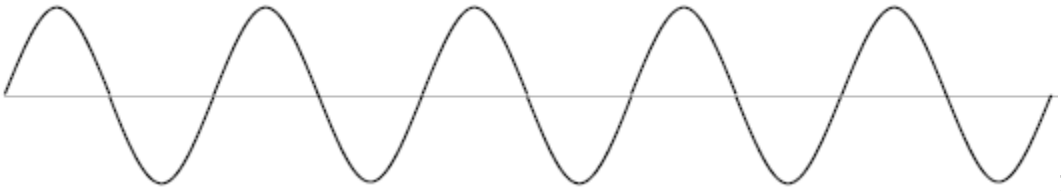
Wave Worksheet

One full wave (cycle)



Amplitude – measures the energy of a transverse wave
measured from the equilibrium position to the top of a crest or the bottom of a trough (see vertical arrow)
Wavelength – length of a single wave cycle (horizontal arrow double sided arrow)
Frequency-# of waves that pass a point in a given amount of time
Speed = wavelength x frequency

Wave 1

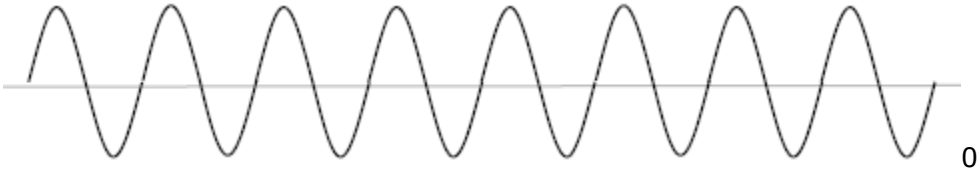


2.0 seconds

a) How many waves are there in this wave? _____

b) Wavelength _____ cm c) Amplitude _____ cm d) frequency _____

Wave 2

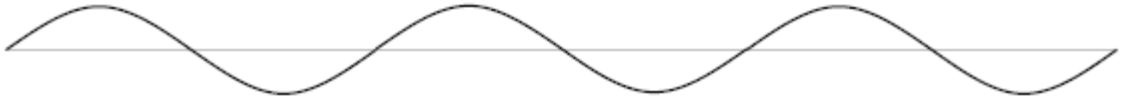


0.1 seconds

a) How many waves are there in this wave? _____

b) Wavelength _____ cm c) Amplitude _____ cm d) frequency _____

Wave 3

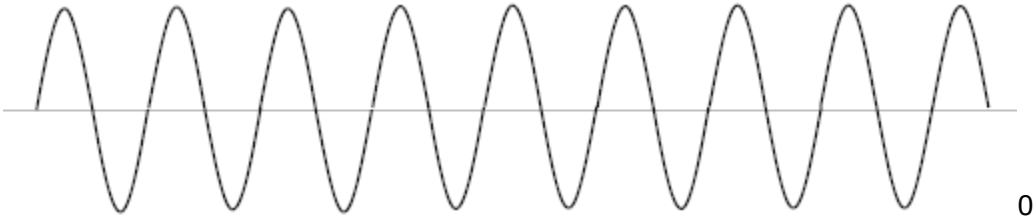


4.0 seconds

a) How many waves are there in this wave? _____

b) Wavelength _____ cm c) Amplitude _____ cm d) frequency _____

Wave 4



0.02 seconds

a) How many waves are there in this wave? _____

b) Wavelength _____ cm c) Amplitude _____ cm d) frequency _____

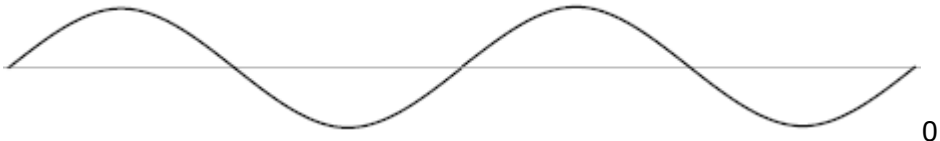
Wave 5

5.0 seconds

a) How many waves are there in this wave? _____

b) Wavelength _____ cm c) Amplitude _____ cm d) frequency _____

Wave 6

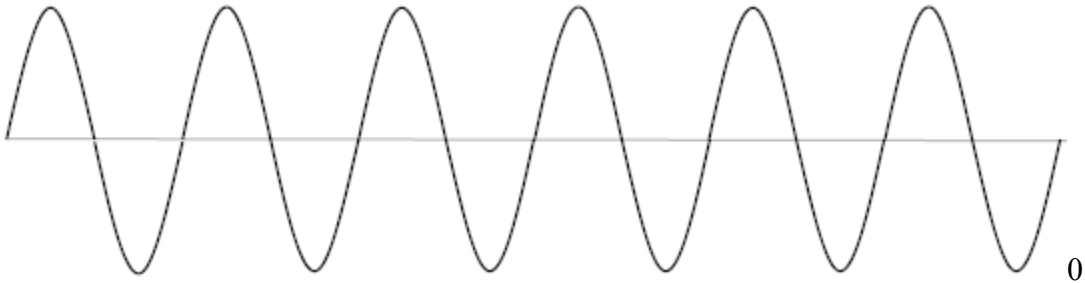


0.25 seconds

a) How many waves are there in this wave? _____

b) Wavelength _____ cm c) Amplitude _____ cm d) frequency _____

Wave 7



0.5 seconds

a) How many waves are there in this wave? _____

b) Wavelength _____ cm c) Amplitude _____ cm d) frequency _____

8. Which wave has the most energy? _____

How do you know? _____