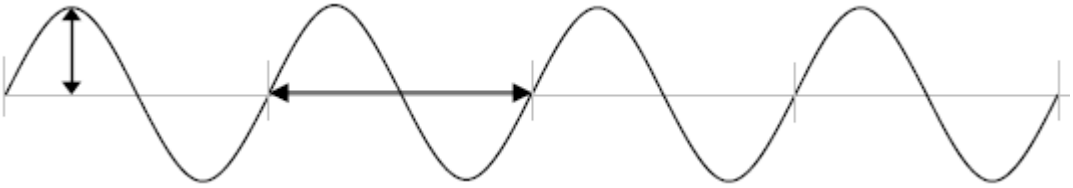
Wave Worksheet

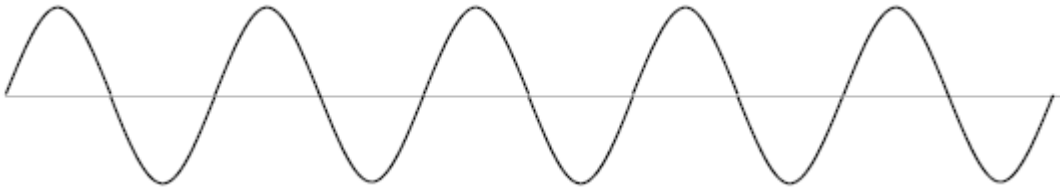
One full wave (cycle) Wave train – two or more waves



Amplitude – measures the energy of a transverse wave
a) 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

The time from the beginning to the end of the wave train in each situation is 1 second.

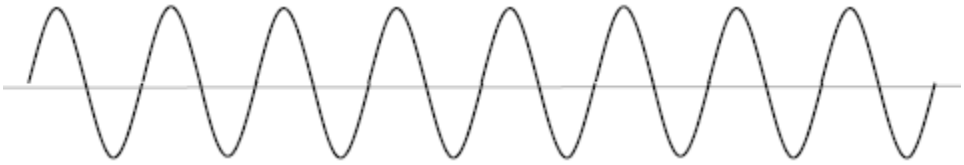
Wave 1



a) How many waves are there in this wave train? _____ b) Wavelength _____ cm

c) Amplitude _____ cm d) frequency _____ Hz e) speed _____ cm/s

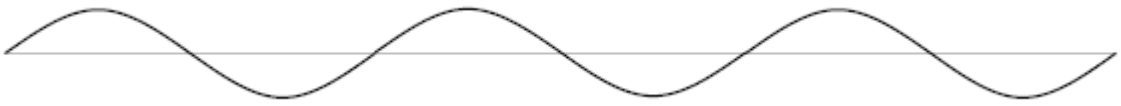
Wave 2



a) How many waves are there in this wave train? _____ b) Wavelength _____ cm

c) Amplitude _____ cm d) frequency _____ Hz e.) speed _____ cm/s

Wave 3



a) How many waves are there in this wave train? _____ b) Wavelength _____ cm

c) Amplitude _____ cm d) frequency _____ Hz e.) speed _____ cm/s