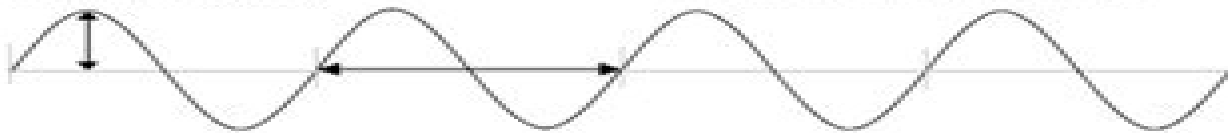


Wave Worksheet

One full wave (cycle)

Wave train – two or more waves



Amplitude – measures the energy of a transverse wave

- measured from the resting 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

Problems:

1. What is the wavelength of a sound wave with a frequency of 50 Hz? The speed of sound is 342 m/s.
2. A sound wave in a steel rail has a frequency of 620 Hz and a wavelength of 10.5 m. What is the speed of sound in steel?

Elements Of Physics Wave Worksheet

N Colangelo



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Unveiling the Magic of Words: A Report on "**Elements Of Physics Wave Worksheet**"

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