Waves Worksheet
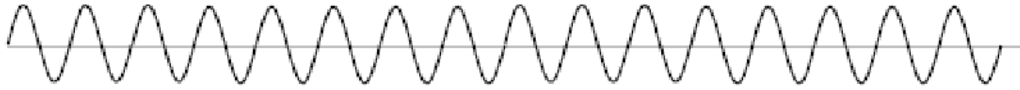
Name:

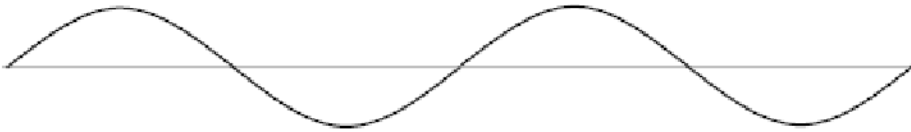Date: Period:

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

a) How many wave cycles are completed in this diagram? _____

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

Wave 6
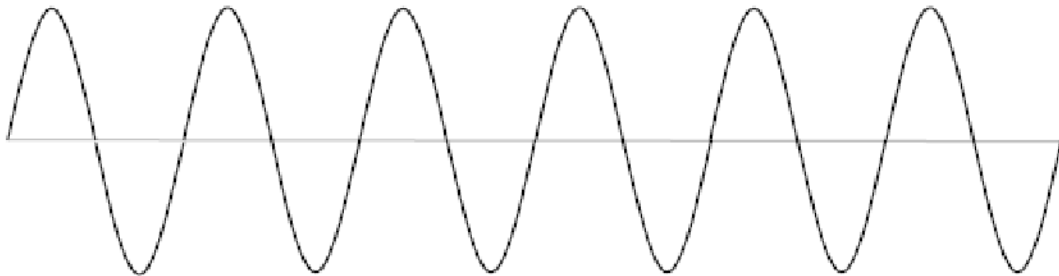

a) How many wave cycles are completed in this diagram? _____

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

Wave 7
If this entire wave train is 30 meters long what is the wavelength of this wave? _____

Challenge Problems: (Show equation, work, final answer with correct units.)
1. What is the wavelength of a sound wave with a frequency of 50 Hz? (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?

3. Determine the frequency of a microwave 6.0 cm in length. (A microwave is an electromagnetic wave. It travels through space at a speed of 3.0 x 10 ^8 m/s)

4. What is the period of the microwave in problem 3?

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