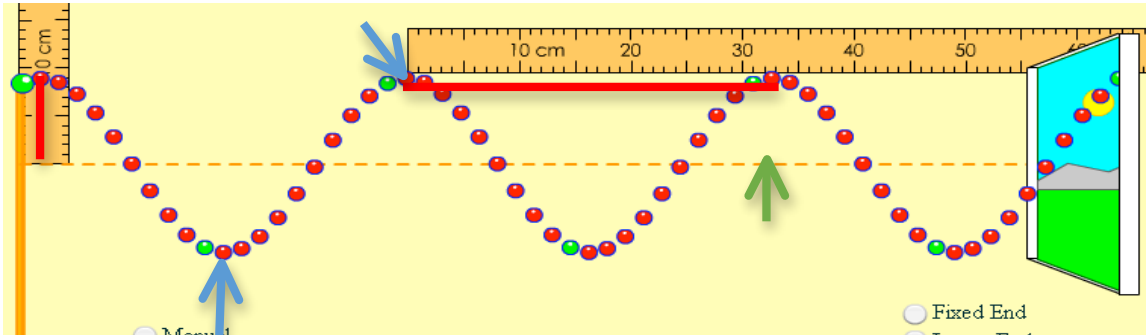# Waves Problem Practice

Identify the crest, trough, amplitude, direction the wave is travelling, direction of medium oscillation (how are the individual dots moving?), and wavelength of a wave.

1. How does frequency affect amplitude?

2. A wave is known to have a frequency of 20 Hz, wavelength of 0.5 m, and amplitude of 1.2 m. If the amplitude of the wave is doubled, the wave will have a frequency equal to _____.

3. A wave is known to have a frequency of 20 Hz, wavelength of 0.5 m, and amplitude of 1.2 m. If the frequency of the wave is doubled to 40 Hz, the wave will have an amplitude equal to _____.

4. A wave is known to have a frequency of 20 Hz, wavelength of 0.5 m, and amplitude of 1.2 m. If the frequency of the wave is doubled, the wave will have a wavelength equal to _____.

5. A wave is known to have a frequency of 20 Hz, wavelength of 0.5 m, and amplitude of 1.2 m. If the wavelength of the wave is doubled, the wave will have a frequency equal to _____.

6. A wave is known to have a frequency of 20 Hz and wavelength of 0.5 m. The speed of this wave is_____.

7. A wave is traveling through a medium at 0.8 m/s with a wavelength of 0.4 meters. What is the frequency of the wave?

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