Wave Basics

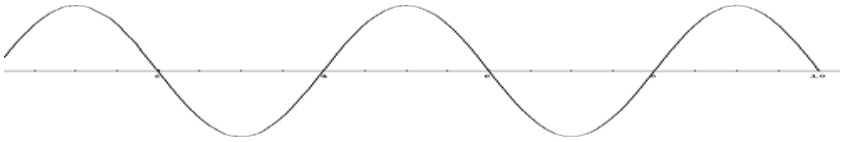
Name: _____

Use the PhET sim "Wave on a String" for the next questions. http://PhET.colorado.edu

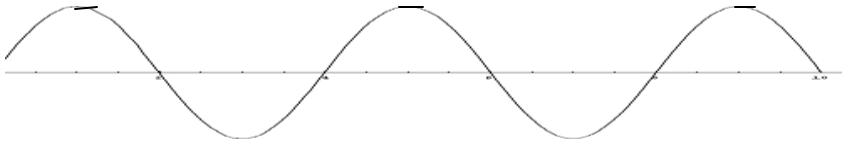
Play around and get familiar with the sim first. Be sure to try out all the buttons.

1. Are you familiar with longitudinal and transverse waves? Which type of wave is being shown by this sim?

2. Use arrows, or draw on the wave, to show what will happen when the **amplitude** is increased:



3. Use arrows, or draw on the wave, to show what will happen when the **frequency** is increased:



2. What direction does each individual part of the string move when a wave travels along it?

3. What direction does the actual wave move (hint, try pulse)?

4. The speed of the wave is how fast it travels from the oscillator/wrench to the clamp/window/loose end. Does the speed vary depending on Amplitude, Frequency, damping or tension? Make a table showing how/if it changes with **each**?