



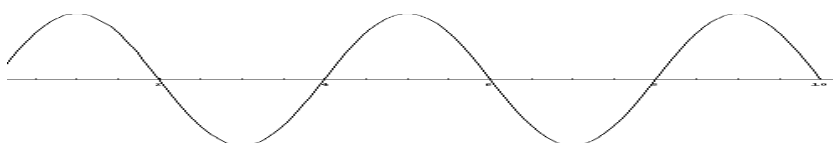
Wave Basics

Name _____

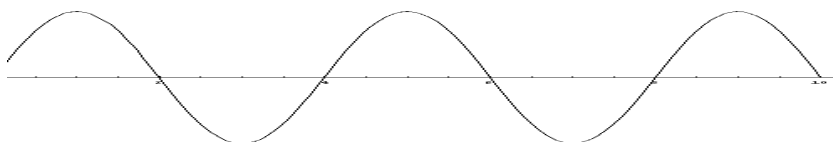
Use the PhET simulator, “Wave on a String” for the following questions.

<https://phet.colorado.edu/en/simulation/wave-on-a-string>

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



4. What direction does each individual part of the string move when a wave travels along it?
5. What direction does the actual wave move (*hint: try pulse*)?
6. 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.