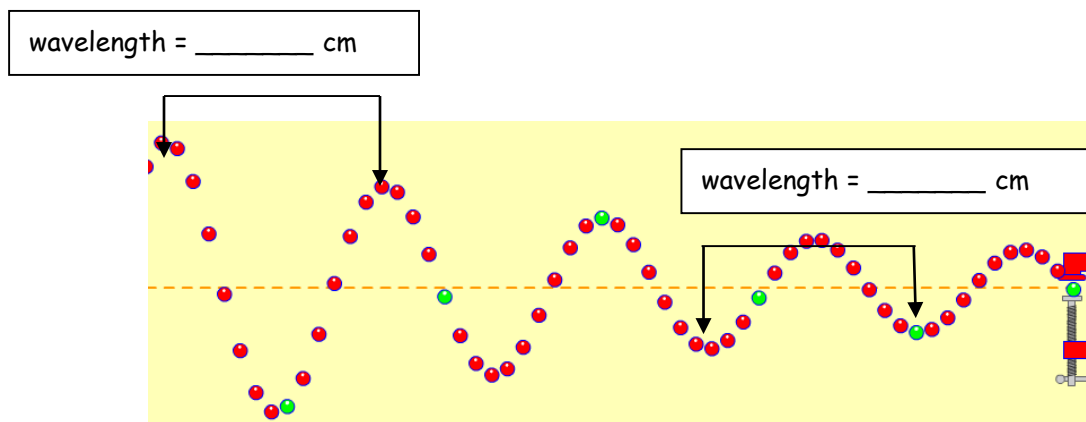


Unit 5 - Energy Movement

Activity 2 – Wave on a String (PhET) – Student Data Sheet

1. Open the PhET simulation named ‘Wave on a String’ -(https://phet.colorado.edu/sims/wave-on-a-string/wave-on-a-string_en.html)
2. Change your settings to observe wavelength and frequency:
 - Set your controls to Oscillate and Fixed End
 - Check the box ‘Rulers’
 - Use the pause button to stop the wave for easier measurement.
3. Use the ruler to measure the wavelength at two different places in the wave and record your results. See the example below.



What did you notice about the wavelengths at different places in the wave?

4. Make a prediction about what you think will happen to the wavelength if you change the frequency setting.

5. Change the frequency settings 3 times and observe the effect this has on the wavelength. What pattern, if any, do you see?

6. Now record some data as you change the frequency settings.

FREQUENCY	WAVELENGTH

Based on your data, write a statement about the relationship between frequency and wavelength.