## M8L2 Activity 1

Go to the following website: <u>https://phet.colorado.edu/sims/pendulum-lab/pendulum-lab\_en.html</u>

Measure the period of the motion for a particular set of initial conditions. Investigate what happens to the period as you adjust...

- The mass of the ball.
- The initial angle of the pendulum.
- The length of the string.
- The value of the acceleration due to gravity.
- See if you can write an equation for the period of the pendulum as a function of some or all of the parameters above that works for small-amplitude oscillations.

Take a screenshot of your motion graphs and energy graphs and paste in the space below. Also provide a proposed equation for what is observed.

Upload your document for grading.