Using Computational Thinking Activity #1: Pendulum Simulation

Engage learners in computer simulations with the following pendulum simulations:

- Pendulum Lab from PhET Interactive Simulations from the University of Colorado Boulder – visit the website or use the embedded version below
- Simple Pendulum from MyPhysicsLab.com (requires Java web browser plugin)

Related Crosscutting Concepts:

- Cause & Effect
- Scale, Proportion & Quantity
- Systems & System Models
- Structure & Function

Related Disciplinary Core Ideas:

- Core Idea PS2: Motion and Stability: Forces and Interactions
    - PS2.A: Forces and Motion
    - PS2.B: Types of Interactions
    - PS2.C: Stability and Instability in Physical Systems
- Core Idea ETS1: Engineering Design
    - ETS1.A: Defining and Delimiting an Engineering Problem
    - ETS1.B: Developing Possible Solutions
    - ETS1.C: Optimizing the Design Solution