Activities

Welcome to the activities page! Here you'll find interactive and hands-on exercises to deepen your understanding of modern classical mechanics.

Sample Activity: Pendulum Lab

- **Objective:** Explore the motion of a simple pendulum and measure its period.
- **Materials:** String, weight, stopwatch, ruler.
- **Instructions:**
  1. Set up a pendulum of known length.
  2. Displace it by a small angle and release.
  3. Measure the time for 10 oscillations.
  4. Calculate the period and compare with theory.

  Tip: Try different lengths and plot period vs. length!

Sample Activity: Energy Skate Park (PhET)

- **Objective:** Investigate conservation of energy using a virtual skate park.
- **Link:** PhET Energy Skate Park
- **Instructions:**
  1. Open the simulation and build a track.
  2. Observe kinetic and potential energy as the skater moves.
  3. Experiment with friction and track shapes.

Add your own activities in `activities.md` using markdown!