

Project Checklist

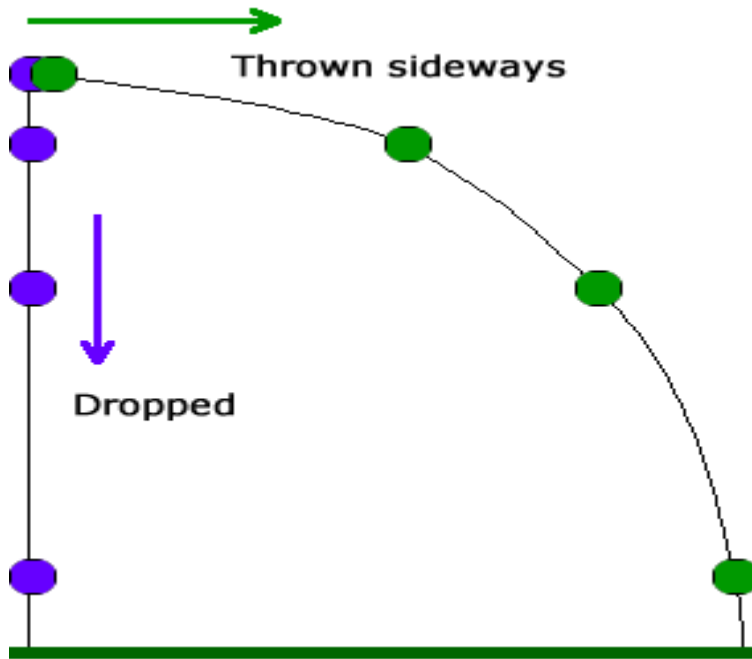
→ Minimum goal

Figure 1.1

- Project a ball falling from some height on an oscilloscope.
 - Control the vertical acceleration of the ball and the horizontal distance it travels.
 - This will mean controlling the gravity and horizontal velocity.

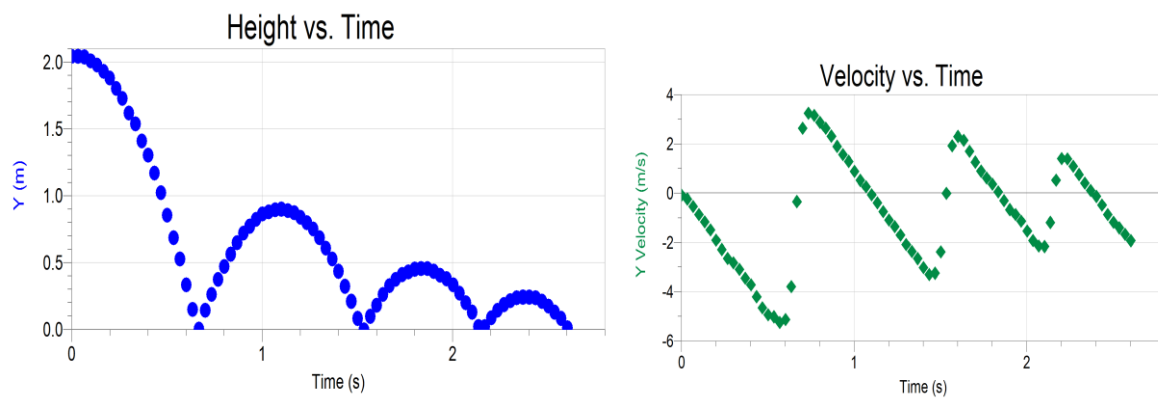
→ Main goal

Figure 1.2

- Simulate the motion of an elastic ball bouncing on a concrete.
 - ➔ Design and build circuits to control both the horizontal and vertical motion.
 - ➔ Control the coefficients of Elasticity, gravity, and horizontal acceleration.
 - ➔ Design and build Circuit to display the ball on an oscilloscope.

3. Stretch Goal

➔ Display the simulation of the ball bouncing on a wall using galvanometers and lasers.