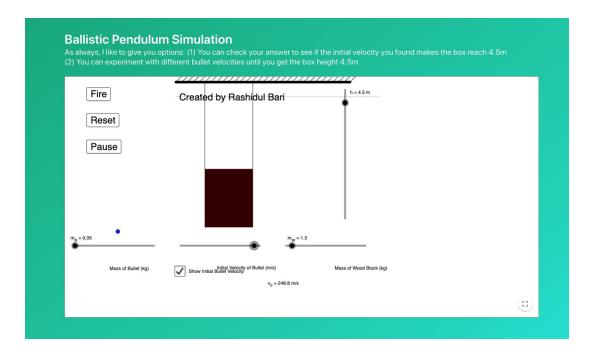**Big Idea :** Ballistic Pendulum

Website | https://barisciencelab.tech/L4BallisticPendulum.html

Q1. A 0.05 kg bullet strikes a 1.3 kg box and displaces it by a height of 4.5 m. After hitting the box, the bullet becomes embedded and remains inside the box. Find the velocity of the bullet-block system after it's hit.

    (a) 6.76 m/s
    (b) 5 m/s
    (c) 9.39 m/s
    (d) 7.67 m/s

Now use the above velocity (of the bullet-block system) to find the bullet's velocity before it hit the box.

    (e) 196.76 m/s
    (f) 100.07 m/s
    (g) 209.39 m/s
    (h) 253.53 m/s

You have 3 ways to answer the multiple choice challenges above: You can (1) Use No Hints and persevere, (2) Use the Small Hint, (3) Use the Big Hint, or (4) Use the Hands-On Simulation.