Do Now: Ballistic Pendulum
Website | https://barisciencelab.tech/L4BallisticPendulum.html
Q1. Mr. Bari drops two objects: a tennis ball ( 0.05 kilograms) and a dumbbell (5 kilograms) from 2 meters above the ground. Find the following listed in the table the instant before the object hits the ground:

|  | Tennis Ball | Dumbbell |
| :--- | :--- | :--- |
| Mass |  |  |
| Time |  |  |
| Velocity |  |  |
| Momentum |  |  |

Q2. This time, there is a piece of glass on the ground. Say Mr. Bari drops the tennis ball and the dumbbell (both with the same masses from before) at a height of 2 meters. Now find the momentum of both objects before hitting the glass and compare it to their momentum before hitting the ground.

Find momentum of the tennis ball right before hitting the glass

Find momentum of the tennis ball right before It hit the ground


Find momentum of the dumbbell before hitting the ground
Find momentum of the dumbbell just before hitting the glass

Q3. What causes the change in momentum?

