

## THE CONSERVATION OF MOMENTUM

NAMR: \_\_\_\_\_ SECTION: \_\_\_\_\_

Click the link, [https://www.gigaphysics.com/momentum\\_lab.html](https://www.gigaphysics.com/momentum_lab.html) to go to **Conservation of Momentum Virtual Lab**.

When the virtual lab opens, click **New Experiment** to ensure that you have reset your cart data before you do the experiment.

Follow the procedure discussed in the Webquest week 4 lesson 4.

### PART I: INELASTIC COLLISION DATA TABLE

**Table 1**

| Mass of purple cart (kg) | Length of purple cart (m) | Mass of green cart (kg) | Length of purple cart (m) |
|--------------------------|---------------------------|-------------------------|---------------------------|
|                          |                           |                         |                           |

**Table 2**

|                                      | Elapsed time (s) | Length (m) | Velocity (m/s) |
|--------------------------------------|------------------|------------|----------------|
| Purple cart before collision         |                  |            |                |
| Green cart before collision          |                  |            |                |
| Carts stuck together after collision |                  |            |                |

**Table 3**

|                                      | Mass (kg) | Velocity (from table 2) | Momentum kg.m/s |
|--------------------------------------|-----------|-------------------------|-----------------|
| Purple cart before collision         |           |                         |                 |
| Green cart before collision          |           |                         |                 |
| Carts stuck together after collision |           |                         |                 |

**Table 4**

|                         | Purple cart's momentum | Green cart's momentum | Total momentum |
|-------------------------|------------------------|-----------------------|----------------|
| <b>Before Collision</b> |                        |                       |                |
| <b>After Collision</b>  |                        |                       |                |

*note: screenshot your data table, do not click FINISH, no score will be generated. . .*