

Name: _____

Number: _____

Date: ____/____/____

Unit 5: Newtonian Mechanics –Linear Momentum

LAB: Impulse-momentum theorem

Objective: Analyze data to characterize the change in momentum of an object from the average force exerted on the object and the interval of time during which the force is exerted.

Equipment:

- Options: PASCO system, PASCAR, force sensor, force sensor mounting bracket, motion sensor, track, extra masses, and any additional materials you choose.

Safety:

- Take care that cars stay on the tracks.

Procedure:

- Helpful tip: Create a collision of the car against the force sensor.
- Run an error analysis. Redo the experiment if the error is above 10% difference.