

Name: \_\_\_\_\_

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## **Unit 5: Newtonian Mechanics –Linear Momentum**

### **LAB: Conservation of Momentum**

Objective: Plan data collection strategies to test the law of conservation of momentum in a two-object collision that is elastic *or* inelastic and analyze the resulting data graphically.<sup>1</sup>

Hypothesis: State your hypothesis.

Safety: Take care that the cars stay on the tracks.

Background: On what principles did you base your hypothesis and your procedure?

Equipment:

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

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<sup>1</sup> Note: No energy analysis is called for. This is Learning Objective 5.D.2.2.

