Name:

Partner:

Physics 12
M. Lam

Elastic Collision Lab

Block:

Introduction
An elastic collision can be preformed with the magnetic bumpers of two Pasco carts. The purpose of this lab is to determine whether momentum and kinetic energy are conserved in an elastic collision.

Equipment
Below is a list of available equipment. Circle all equipment used.

low-friction track	meter stick	video camera
Pasco carts (2)	stopwatch	
tape	electronic balance	

Apparatus
Draw and label a diagram of your apparatus.

Experimental Method
Describe how your data is collected. Include any steps necessary to reduce experimental uncertainty.

Data
Record all measurements. If appropriate, organize your data in a table.

Analysis and Discussion

Describe how the data is used to determine whether momentum and kinetic energy are conserved in an elastic collision. Show an example for each type of calculation.

Identify and discuss a minimum of two sources of error. Put a star next to what you believe to be the most significant source of error.

Conclusion

Momentum is _____ in an elastic collision.
conserved/not conserved

Kinetic energy is _____ in an elastic collision.
conserved/not conserved