

Momentum Activity

Homework

Names: _____

Finish collecting the data.

Fill out the data table's below using data from experiments 1 and 4.

Experiment 1

Trial	Cart	Mass	Initial velocity before the collision	Final velocity after the collision	Cart's Kinetic Energy Before the Collision $KE = \frac{1}{2}mv^2$ Calculate this value	Cart's Kinetic Energy After the Collision $KE = \frac{1}{2}mv^2$ Calculate this value	Add all the KE's of orange & blue before the collision	Add all the KE's of orange & blue after the collision
1	Orange	1	1					
	Blue	1	0					
2	Orange	1	1					
	Blue		0					
3	Orange	1	1					
	Blue		0					
4	Orange	1	1					
	Blue		0					
5	Orange	1	1					
	Blue		0					

Experiment 4

Trial	Cart	Mass	Initial velocity before the collision	Final velocity after the collision	Cart's Kinetic Energy Before the Collision $KE = \frac{1}{2}mv^2$ Calculate this value	Cart's Kinetic Energy After the Collision $KE = \frac{1}{2}mv^2$ Calculate this value	Add all the KE's of orange & blue before the collision	Add all the KE's of orange & blue after the collision
1	Orange							
	Blue							
2	Orange							
	Blue							
3	Orange							
	Blue							
4	Orange							
	Blue							
5	Orange							
	Blue							

To conserve a quantity means the total before the collision equals the total after the collision. Are momentum and kinetic energy conserved? How do you know?