

# Investigating Momentum

## Equations

Recall the equations for momentum and kinetic energy

Momentum:

Kinetic Energy:

## Simulate Collisions

Using the online simulation ([www.tinyurl.com/momentum-test](http://www.tinyurl.com/momentum-test)), investigate the resulting momentum from collisions between 2 balls. Investigate the momentum and kinetic energy before and after the collisions.

## Momentum

Fill in the momentum from before and after the collisions

	Initial		Final		Elastic?
	Ball 1	Ball 2	Ball1	Ball 2	
1					
2					
3					
4					
5					

What do you notice about Momentum before and after the collisions? (Hint: Try comparing the totals for before and after the collision)

## Kinetic Energy

	Initial		Final		Elastic?
	Ball 1	Ball 2	Ball1	Ball 2	
1					
2					
3					
4					
5					

**What do you notice about Kinetic Energy before and after the collisions? (Hint: Try comparing the totals for before and after the collision)**

Word Bank – fill in the definitions

Conservation of Momentum:

Equation:

Elastic Collision:

Inelastic Collision: