Name: _____ Date: _____ Period: _____

In collisions momentum is _____ because all of the forces acting

are _____forces.

Remember: According to the Law of Conservation of Momentum, an _____force
is required to change the momentum of a system.

Net momentum before collision = _____

$p_1 =$ $p_2 =$

$p_1 =$ $p_2 =$

$p_{before} =$

$p_{after} =$

$p_1 =$ $p_2 =$

$p_1 =$ $p_2 =$

$p_{before} =$

$p_{after} =$

$p_1 =$ $p_2 =$

$p_1 =$ $p_2 =$

$p_{before} =$

$p_{after} =$

Each of these examples demonstrates a collision where the objects bounced off each other without any
damage.

These are _____- when colliding objects rebound
perfectly without heat or damage

More common in the "real world" are _____-
when colliding objects rebound with heat or damage occurring

v = 10 →   v = 0

v = 5 →
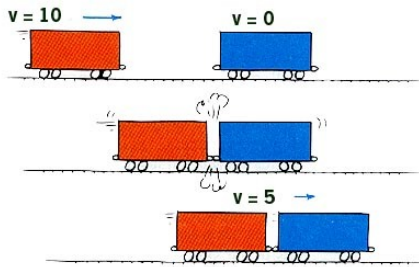
2 x 5 = 1 x 10

SHAPE * MERC

In a perfectly inelastic collision, both

objects _____

_____

If both of these objects have the

_____

_____ they

stop dead in their tracks.

What would happen if the
truck on the left had more
initial momentum?

_____

_____

_____

_____

_____

The _____applies to both types of collisions.