

Collisions SPH4U

All interactions conserve _____.

They do *not necessarily* conserve _____.

Obvious example: _____

Kinetic energy before is _____.

Kinetic energy after is _____.

Example: A ball of mass 0.5 kg travelling at 10 m/s strikes a stationary box of mass 0.5 kg and stays in the box. (a) What is the speed of the ball and box?

(b) What is the change in kinetic energy of the system?

A collision in which kinetic energy is lost is called an _____ collision.

A collision in which the _____ possible energy is lost is called a _____
_____ collision.

The maximum possible energy loss (if no work is done on the objects) occurs when the two objects

_____.

More Practice: p. 251 #10 and p. 253 #6, 7