



CRASH SCIENCE IN THE CLASSROOM.

## **BALL OF ENERGY**

NGSS Standards Alignment

### **High School**

#### **HS-PS3-1**

*Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.*

#### **HS-PS3-2**

*Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motions of particles (objects) and energy associated with the relative positions of particles (objects).*

#### **HS-PS2-2**

*Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system.*

### **Middle School**

#### **MS-PS3-5**

*Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.*

