

ENERGY AND WORK UNIT ORGANIZER

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STANDARDS FOR ACHIEVEMENT AND PERFORMANCE:

1. Distinguish between potential and kinetic energy.
2. Difference between work and energy.
3. The energy of a system is always conserved.

ASSESSMENT:

1. Kinetic Energy lab.
2. Work and energy worksheets
3. Motion/Force/Energy/Work test
4. Bungee jump lab.

CORE KNOWLEDGE SEQUENCE:

1. In physics, work is a relation between force and distance: work is done when force is exerted over a distance.
2. In physics, energy is defined as the ability to do work.
3. Energy as distinguished from work: work is the transfer of energy.
4. Two main types of energy: potential and kinetic.
5. Energy is conserved in a system.

COLORADO STATE STANDARDS:

1. Determine the potential and kinetic energy of a cart as it moves up and down an inclined plane.
2. Interpret and explain the relationship among kinetic energy, potential energy, and mechanical advantage.
3. Understand that chemical energy is stored in chemical bonds between atoms in elements and compounds.