POWER AND MACHINES UNIT ORGANIZER

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STANDARDS FOR ACHIEVEMENT AND PERFORMANCE:

1. Power is work divided by time.
2. Six simple types of machines.
3. Determine mechanical advantage and efficiency.

ASSESSMENT:

1. Power and work worksheets.
2. Identify the type of machine lab.
3. Pulley lab.
4. Lever lab.
5. Machines worksheet.
6. Power and Machines test.

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.

COLORADO STATE STANDARDS:

1. Demonstrate that simple machines can be used to change the direction or size of a force.

2. Determine the potential and kinetic energy of a cart as it moves up and down an inclined plane.

3. Interpret and explain the relationship among kinetic energy, potential energy, and mechanical advantage.