Types of Potential Energy

Checks for Understanding: 0607.10.2
Potential Energy

• is energy stored in an object due to its position or shape.

A backpack sitting on a chair doesn't have any kinetic energy because it isn't moving, however, if energy is transferred to the object it has the potential to move. You can transfer your own energy to the bag and pick it up or move it.

It has the potential to move....
Gravitational Potential Energy

- any object that can move due to the gravitational pull of earth
- gravitational potential energy increases with an objects mass and height.

- Which items on this bookshelf have gravitational potential energy?

- If the red vase and the blue vase have the same mass, which has the most gravitational potential energy?
Elastic Potential Energy

- has potential energy due to its shape or material the object is made of

These hands are pulling back a rubber band.

Which hand has the most potential energy? Which rubberband will travel the furthest?

Is there a direct correlation between the distance pulled on the rubberband and the distance the band traveled?
Chemical Potential Energy

- has potential energy due that is released during a chemical reaction

Example: When eating, food molecules are broken apart through a series of chemical reactions, energy is then released.
Potential Energy

Pull the words from behind the bookshelf and place in the correct category

| A | Chemical |
| B | Gravitational Potential |
| C | Elastic Potential |