

Energy Stores and Transfers



1. Describe where each of the energy stores can be found in the picture.

nuclear: _____

gravitational potential: _____

elastic potential: _____

kinetic: _____

magnetic: _____

internal (thermal): _____

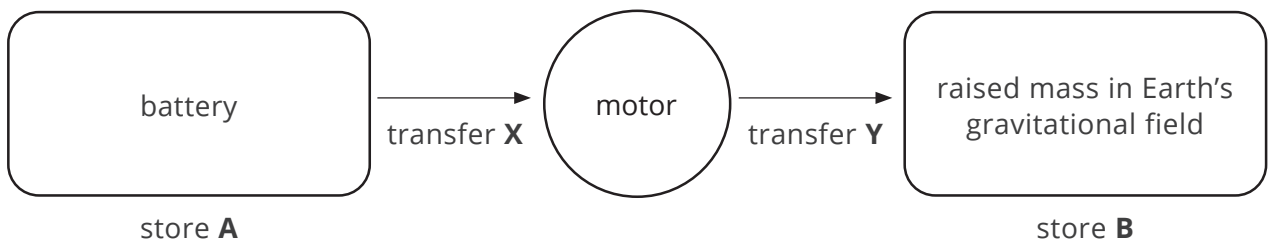
chemical: _____

electrostatic: _____

2. As the child moves down the slide, energy is transferred mechanically to the internal (thermal) energy store of the slide.

Name the force that causes this energy transfer.

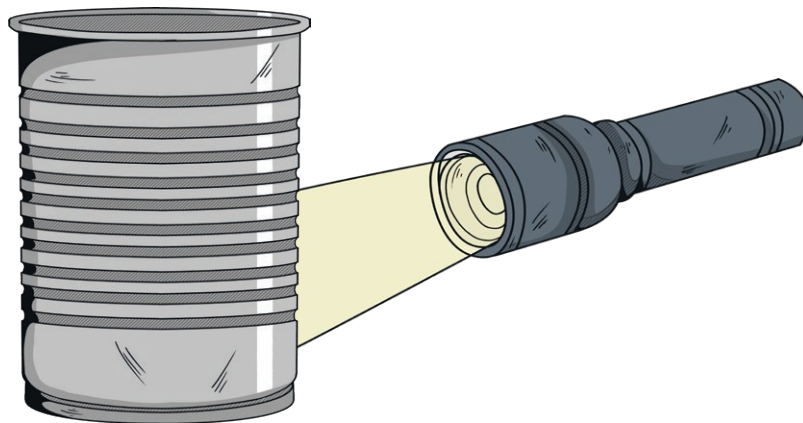
A battery-powered motor is used to lift a small mass off the ground. An energy transfer diagram for the system is shown below.



3. Draw **one** line from each label to the way that energy is stored or the pathway by which energy is transferred.

store A	chemical
store B	gravitational potential
transfer X	kinetic
transfer Y	electrically
	by heating
	mechanically

A battery-powered torch is shone on a metal can containing water. The temperature of the water increases.



4. Complete the sentences to describe the energy stores and transfers in the system. Choose answers from the box. Some words may be used more than once.

chemical	electrically	particle movement	radiation	internal
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Energy is transferred _____ from the _____ energy store of the battery to the bulb, and then by heating via _____ to the _____ energy store of the can. Energy is then transferred by heating via _____ from this energy store to the _____ energy store of the water.