JEA

e-SMARTkids

ACTIVITY TIPS

Kinetic vs. Potential

This activity appears in the section *How Energy Behaves*. It asks students to observe their surroundings and identify three examples of kinetic energy in action and three situations where potential energy exists.

Students' answers will vary. When evaluating their responses, look for a clear distinction between situations displaying the energy of motion in action (kinetic energy examples) and those displaying the potential for motion (potential energy examples).

This activity also asks students to identify one situation they have observed (or can imagine) where kinetic energy converts into potential energy, or vice versa. Here is one example of this conversion that you might share with students who are not able to provide their own answer:

> When a roller coaster car reaches the top of a hill, it possesses gravitational potential energy due to its height above the ground. As the car descends the hill, this potential energy is converted into kinetic energy, which is the energy of motion. At the bottom of the hill, the car has maximum kinetic energy and minimum potential energy. As the roller coaster car ascends the next hill, its kinetic energy is converted back into potential energy.