

Converting Energy to Motion

Cross-Curricular Focus: Physical Science



You use energy every day. Energy is the ability to cause change. Any time you move, you are using energy. When you bounce a ball or ride a bike, you use energy from your body to make the ball or the bike move. Your parents cook food for you to eat. They use heat energy to change the food from raw to cooked.

Not all energy is used as soon as you get it. Sometimes energy is **stored** to be used later. Stored energy can be chemical energy stored in a battery or in your body. It can also be potential energy. Potential energy is based on the position of the object. A ball at the top of a hill has potential energy. A soccer player standing ready to kick a ball has potential energy, too.

Energy of **motion** is also called kinetic energy. Potential energy **converts**, or changes into, kinetic energy when the thing or person begins to move. When the ball starts rolling down hill, kinetic energy is at work. When the soccer player kicks the ball, kinetic energy is at work there, too.

Energy often changes forms. When you switch on the light, electricity converts into light. When you eat, chemical energy from your food converts into thermal and mechanical energy that allows you to move and work. When you switch on a cell phone, chemical energy from the cell phone's battery converts into sound energy and light energy.

Name: _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) What is energy?

2) Energy that is based on an object's position is called

3) What is another name for energy of motion?

4) What is another way to say "changes into"?

5) What is kinetic energy?
