

# Energy Transfer- Kinetic Energy

## Kinetic Energy

Kinetic energy is the energy an object has due to its motion. If an object is moving at the same velocity, it will maintain the same kinetic energy.

The kinetic energy of an object is calculated from the velocity and the mass of the object.

**Activity:** Discuss these questions about kinetic energy.

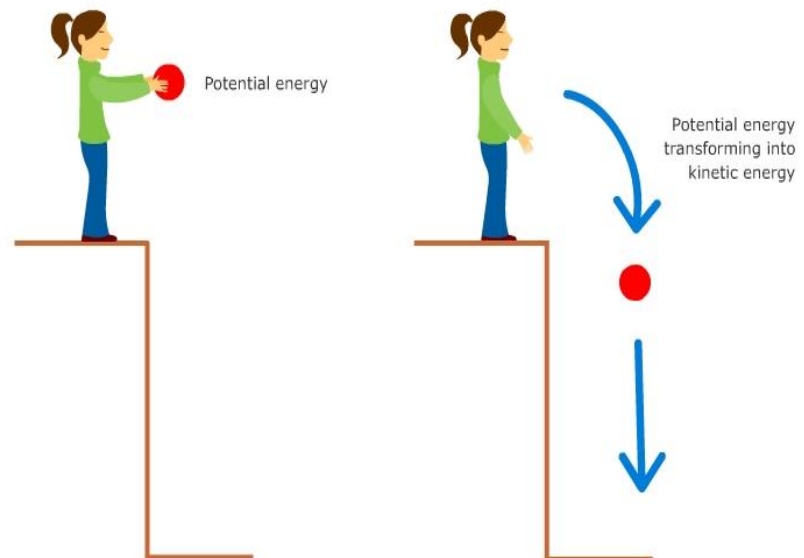
1. How does kinetic energy differ from potential energy?
2. Does a car have kinetic energy when it is going up the hill or down the hill?
3. If a car and bicycle are traveling at the same speed, which has more kinetic energy? Why?

## Terms:

**Velocity-** It is the rate of change in an object's position.

It has a speed and a direction.

**Mass-** Mass is a measurement of how much matter is in an object.



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