

# Law of Conservation of Energy

Energy cannot be created or destroyed.

It can be...

## Transferred to another object

When two objects run into each other or collide, energy transfers from one object or system to the other.



Energy is transferred from the bat to the ball.

## Changed into another form of energy



Heat



Light



Sound

As an object slows down or stops, the kinetic energy does not disappear. The kinetic energy changes into another form of energy. It could change into heat, light, sound, or other forms of energy.



This ball is moving.

This ball is still

What will happen when the moving ball hits the still ball?

Energy will be transferred from the moving ball to the ball that is still. The still ball will start moving. Energy is not created or destroyed, it is transferred.



## Try it!

When you rub your hands together, the kinetic energy changes into heat energy.