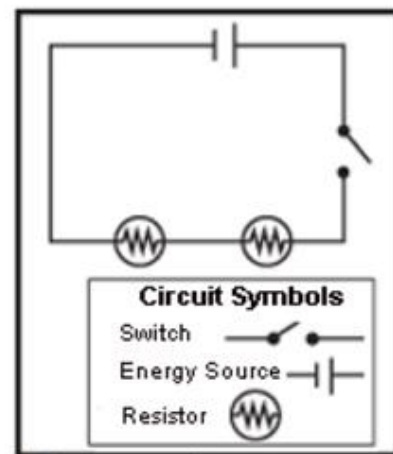


A Closed Circuit



Energy source

Batteries are the power source for this circuit. They cause the electric charges to flow.

Means of Energy Transfer

The wires provide a path through which the charges flow.

Resistor

A coiled wire is inside the light bulb. This wire is made of a material with a high resistance.

Resistance means the material does not allow electric charges to flow through it easily. Because of this resistance, the flowing electric charges heat up the wire. The wire gives off light.



Switch

When this switch is closed, the circuit is closed. The electric charges flow without any interruptions.



Insulated Wire

The copper wire is insulated with a plastic covering.



1. **✓ Checkpoint** What is the difference between an insulator and a conductor?
2. **🌀 Cause and Effect** What causes some materials to be good insulators of electricity?