

Lighting a Light Bulb

Electricity All Around Us Backgrounder



Electricity is energy and it can flow through wires. Electricity flows in one direction called a current. The current flows from the negative end to the positive end.



To light up the bulb, the wires need to be attached to the top and bottom of the battery and to the bottom (metal contact) and upper part of the metal screw head of the light bulb. This is an example of a closed circuit. When a circuit is closed it means that there is a continuous path for the electrons to flow along. When you turn a light switch on, you close the circuit and allow the electrons to flow. When you turn a light off, you open the circuit, preventing the electrons from flowing through the circuit.

Anatomy of a light bulb

The electric current can enter the metal tip or the metal contact. The electricity then flows through the filament and makes it glow. The electric energy is changed into light and heat energy. The bulb lights up and is warm to the touch. Then the electricity flows back down and out either the metal tip or the metal contact. The light bulb is enclosed and sealed because it is filled with a neutral gas such as argon. If there were oxygen inside the bulb, the filament would burn up!

