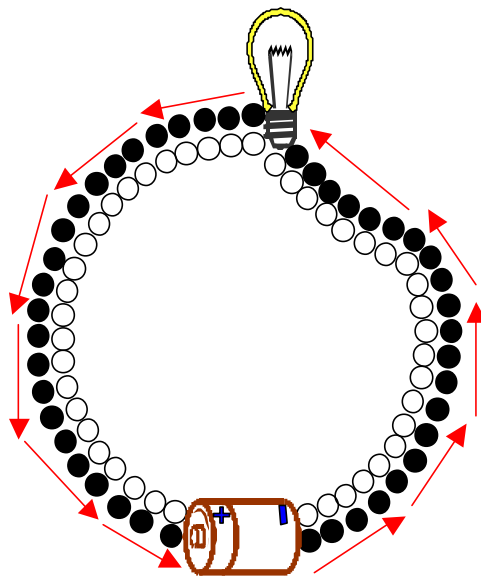


Using Cyclic Simultaneous Causality to Explain the Simple Circuit

Electrical circuits are modeled well using Cyclic Simultaneous Causality.



Electrons flow along the wire and through the bulb and battery in a circle (or closed system). The chemicals in the battery make the electrons move to the negative side of the battery, leaving an excess of protons on the positive side. The excess of electrons is repelled away from other electrons and they move along the circuit wire towards the protons on the positive terminal, pushing the circle of electrons around the wire. Each electron is repelled by the ones "in front of" it and repels the ones "behind" it (so each is a cause of other electrons moving and is an effect because other electrons cause it to move).

The wire already has electrons along it, so almost as soon as you hook up the wire, the whole circle of electrons starts to move or flow. The whole flow of electrons moves at once. It is simultaneous. It moves like a bicycle chain. Current flow (and not electricity reaching the bulb) causes the bulb to light.