

Electrical Connections

GLOSSARY



battery A group of two or more electrochemical cells connected together; also, the more commonly used word to refer to one electrochemical cell, or D-cell.

circuit A path through which electric current flows, transferring electric energy; consists of an energy source, a conducting path, and a receiver that converts the energy to another form, such as light.

circuit diagram A representation of an electrical circuit using symbols.

closed circuit A complete circuit through which electrons (electric current) can flow.

conductor A material through which electrons can move easily.

current electricity A continuous flow of electrons.

electric current A continuous energy transfer by moving electrons.

electric motor A device in which the magnetic field of a magnet interacts with the magnetic field of a current-carrying wire coil and causes rotation.

electromagnetic field The magnetic field existing around objects that have electric current flowing through or around them.

electromotive force A force that pushes electrons through a circuit, thus creating a current.

electroscope A device used to detect static charges.

energy Commonly defined as the ability to do work. Energy brings about changes in systems or their surroundings.

fixed resistor A resistor that has one value of resistance.

galvanometer A device that is used to detect electric current.

insulator A material through which electrons cannot move easily.

knife switch An electric switch in which contact is made by pushing one or more flat metal blades between the jaws of spring clips.

open circuit An incomplete path for electric current; electrons cannot flow through it.

parallel circuit A circuit in which there is more than one path for a current to follow.

potentiometer A variable resistor that is used to control voltage, as in the volume control of a compact disc player.

resistance A measure of a material's ability to hinder the passage of electric current through it.

resistor A device that hinders the passage of current.

rheostat A variable resistor used to control the current in a circuit.

series circuit A circuit in which there is only one path for a current to follow.

static charge The electric charge that resides on an object as a result of excess positive or negative charge.

switch A device that is used to open and close circuits.

three-way switch A configuration of double-throw switches that allows independent control of electric devices from two positions.

two-way switch A switch that has two connecting terminals on each switch.

variable resistor A resistor whose resistance can be changed.

Note: The Delta Science Reader includes its own glossary of terms.