

Glossary

ammeter	A device that measures current flowing in a circuit.
ampere (amp)	The unit of electric current, having the symbol A.
angle of incidence	That number of degrees by which a line deviates from the perpendicular to a designated plane.
anode	The electrode where the oxidation reaction takes place; that is, a reaction where there is a loss of electrons.
catalyst	Any substance that reduces the activation energy of a reaction but does not take part in the net reaction and so remains unchanged.
cathode	The electrode where the reduction reaction takes place; that is, a reaction where there is a gain of electrons.
circuit, electrical	Any closed path followed or capable of being followed by an electrical current.
circumference	The distance around a path or object. The circumference of a circle is determined by multiplying the diameter (or twice the radius) of the circle by π .
compound, chemical	A substance composed of two or more different types of atoms.
current, electrical	A flow of electrons usually measured in amperes and designated by the symbol I.
distilled water	Water which has been made into vapor and then condensed back into pure water so that any dissolved or suspended substances are left behind.
efficiency	A measure of the energy-effectiveness of a system with unity or 1 being a perfect result. Efficiencies are usually expressed as percentages where the output is divided by the input.
electrical generator	A device that produces a flow of electrons.
electrolysis	Chemical change, especially decomposition, produced in an electrolyte by an electric current.
electrolyte	A substance that when dissolved breaks into ions, allowing the resulting solution to conduct electricity.

electrolyzer	A device that uses a flow of electrons to break a compound into its constituent elements. The electrolyzer in this kit breaks water into hydrogen gas and oxygen gas.
electron	A subatomic negatively charged particle.
energy, electrical	The energy (in joules) generated or used by a device can be calculated as the product of its power (in watts) and the time over which that power occurs (in seconds). Often designated by the symbol E.
formula (chemical)	A symbolic expression that describes the number and kind of atoms within one molecule of a substance or ionic compound.
hypothesis	A possible explanation, subject to verification or proof, used as a basis for investigation or further investigation.
input	The amount of whatever is being measured entering a system.
joule	The unit of electric energy, having the symbol J. One joule is equivalent to one watt-second. (The joule is also used as the unit of work and of heat.)
milliampere	One thousandth of an ampere, having the symbol mA.
observation	The use of any and all senses to notice something. Observations could include smells, heat changes, light emissions, movements or sounds.
output	The amount of whatever is being measured leaving a system.
PAR lamp	Parabolic Aluminized Reflector lamp.
patch cord	An electrical conductor made of a flexible insulated cable with plugs or clamps at each end designed to temporarily connect components.
photon	A quantum of electromagnetic energy usually associated with light. Photons exhibit qualities of both waves and particles.
power, electrical	The power (in watts) generated or used by a device can be calculated by multiplying its current (in amperes) times the voltage across its terminals (in volts). Often designated by the symbol P.
prediction	The act of making known in advance what is liable to occur.
questioning	An inquiry that invites or calls for a reply or response.

reaction (chemical)	A chemical change or transformation in which a substance decomposes, combines with other substances or interchanges constituents with other substances.
short circuit	A situation in which a circuit is complete but has little or no resistance or load.
solar cell	A device that changes light into an electric current. Solar cells are usually mounted together to produce a solar panel.
volt	The unit of electric potential difference, having the symbol V.
voltage	A measure of the electrical potential between two points, usually measured in volts and designated by the symbol V.
voltmeter	A device that measures voltage difference between two points in a circuit.
watt	The unit of electric power, having the symbol W.