
Glossary

Analyze: To study something by breaking it down into simpler parts.

Armature: The part of a motor that has electromagnets and that rotates the shaft of a motor when it is running.

Attract: To draw to or toward itself.

Brush: A metal contact that touches a commutator. When the brush touches the commutator, a current flows through the coil of the motor.

Cause: Something that produces an effect.

Classify: To put things together because they share one or more properties.

Commutator: A device that reverses the direction of an electric current through the coil of a motor. The commutator makes the current go through the coil so that the motor turns in only one direction.

Compass: A device that determines the presence of a magnetic field and its direction.

Conclusion: A decision that is based on observations or on a study of data.

Constant: A condition that is not changed in a scientific experiment.

Controlled experiment: A scientific investigation in which one variable is changed and all the others are kept the same, or constant.

Data: Information, such as that gathered during an experiment.

Effect: Something brought about by a cause; a result.

Electric circuit: A system that connects electrical components so that they will operate.

Electric current: A flow of electric charge through something.

Electromagnet: An iron core that is surrounded by a coil of insulated wire. When an electric current passes through the coil, the core becomes a magnet.

Experiment: A procedure that is carried out to investigate a scientific question.

Geographic north pole: The northernmost point on earth.

Hypothesis: A prediction about how something works or how two variables are related.

Infer: To draw a conclusion on the basis of observations and data.

Invent: To think of or create something for the first time.

Magnet: An object made of iron, nickel, or cobalt or a combination of these materials and that has the ability to attract or repel other magnetic materials.

Magnetic field: A space or area in which magnetic forces can be observed. If a magnetic field exists in an area, magnetic forces will deflect a compass needle that is placed in that area.

North-seeking pole: The end of a compass needle or magnet that points to the north magnetic pole of the earth.

Pattern: A repeating arrangement of shapes, colors, numbers, or other things.

Permanent magnet: A magnet that does not lose its ability to attract iron, nickel, and cobalt as time passes.

Procedure: A set of steps that explains how to do something.

Repel: To push away; the opposite of attract.

Result: Effect; something produced by a cause.

Short circuit: A path of low resistance made between two points in an electric circuit where the resistance is normally much higher.

South-seeking pole: The end of a compass needle that would point to the earth's south magnetic pole if the pointer or magnet were free to align itself with the earth's magnetic field.

Troubleshoot: To observe and test a device to see why it is not working.

Variable: An element in an experiment that can be changed.

Weight: A measurement of how heavy something is.