attrakt to pull toward each other (SRB, IG)

battery a source of stored chemical energy (SRB, IG)

bulb base the area on a lightbulb where one of the filament support wires extends down to the metal bead (IG)

bulb casing the inside of the metal screw case on a lightbulb where the second filament support wire connects (IG)

circuit a pathway for the flow of electricity (IG)

closed circuit a complete circuit through which electricity flows (SRB, IG)

code a set of signals that represents letters or words for sending messages (SRB, IG)

coil a series of loops (SRB, IG)

compass an instrument that uses a free-rotating magnetic needle to show direction (SRB, IG)

component one item in a circuit (SRB, IG)

conductor a material through which electric current passes easily (SRB, IG)

contact point the place in a circuit where connections are made to allow electricity to flow (SRB, IG)

core in an electromagnet, the material around which a coil of insulated wire is wound (SRB, IG)

D-cell a source of electricity; also known as a battery (IG)

electric current the flow of electricity through a conductor (SRB, IG)

electrical energy energy that flows through circuits and can produce heat, light, motion, and sound (SRB, IG)

electricity energy that flows through circuits and can produce heat, light, motion, and sound (SRB, IG)

electromagnet a piece of iron that becomes a temporary magnet when electricity flows through an insulated wire wrapped around it (SRB, IG)

electromagnetism a property of electric and magnetic fields that causes interactions with electric charges and currents (SRB, IG)

energy the ability to do work; what allows organisms to grow and move (SRB, IG)

energy source a place where energy comes from, such as batteries, food, fuels (coal, oil, and natural gas), and the Sun (SRB, IG)
filament the material in a lightbulb (usually a thin wire) that makes light when heated by an electric current (SRB, IG)

force a push or a pull (SRB, IG)

fuel a source of energy when burned (IG)

gravity the natural force that pulls objects toward each other. On Earth, all objects are pulled toward the center of Earth. (SRB, IG)

heat energy (thermal) the movement of thermal energy; energy that can make things warm (SRB, IG)

induced magnetism the influence of a magnetic field on a piece of iron, which makes the iron a temporary magnet (SRB, IG)

inference a conclusion formed using indirect evidence (IG)

insulator a material through which electric current does not pass easily (SRB, IG)

interact to act on and be acted upon by one or more objects or organisms (SRB, IG)

iron a metal that sticks to a magnet (SRB, IG)

key a switch that completes the circuit in a telegraph system (SRB, IG)

light observable evidence of energy (IG)

lightbulb a filament held by two stiff wires and surrounded by a clear glass globe (SRB, IG)

magnet an object that sticks to iron or steel (SRB, IG)

magnetic field an invisible field around a magnet (SRB, IG)

magnetism a property of certain kinds of materials that causes them to attract iron or steel (SRB, IG)

mechanical energy energy an object has because of its motion or position (SRB, IG)

metal a conductor for electricity (IG)

motion observable evidence of energy (SRB, IG)

motor a device that produces motion from electricity (SRB, IG)

north pole the end of a magnet that orients toward Earth’s magnetic north pole (SRB, IG)

open circuit an incomplete circuit through which electricity will not flow (SRB, IG)

opposite different as in the two poles of magnets (IG)

parallel circuit a circuit that has two or more pathways for current to flow (SRB, IG)
**pattern** a similar trait or design  

**permanent magnet** an object that sticks to iron  

**pole** the end of a magnet  

**predict** to estimate a future event based on data or experience  

**repel** to push away from each other  

**rivet** a piece of iron or steel around which a coil is wound  

**series circuit** a circuit that has only one pathway for current to flow  

**shaft** the part of a waterwheel that the blades turn  

**short circuit** an unintended pathway that allows current to flow from one terminal of an energy source directly to the other terminal without passing through any other component  

**solar cell** a silicon cell that converts sunlight into electric energy and is used as a power source  

**sound energy** energy that we can hear  

**south pole** the end of a magnet that orients toward Earth’s magnetic south pole  

**steel** a material made mostly of iron  

**switch** a device used to open and close circuits  

**system** a set of objects that are related in some way and can be isolated for study  

**telegraph** a device that uses an electromagnet to send coded messages by closing and opening an electric circuit  

**temporary magnet** a piece of iron that behaves like a magnet only when it is surrounded by a magnetic field  

**terminal** the term used to refer to the ends of a battery  

**transfer** to move from one source to another  

**wire** a metal or other solid substance through which electric current moves