

## Words to Know

**Battery:** The battery will power your circuit. It generates electricity through a chemical reaction. A coin battery, like the one we will use, has a smooth positive side marked by a plus sign (+) and a rough negative side.

**Circuit:** A circuit is a loop made up of different components that allow electricity to flow. A series circuit means that the components are connected along a single path. In a parallel circuit, each component is wired back to the battery in its own loop.

**Conductors:** Conductors are materials, like many metals, that let electrical current flow freely.

**Insulators:** Insulators are materials, like glass, rubber, or plastic, that resist the flow of electricity.

**LED:** LED stands for Light Emitting Diode. They turn electricity into light. Like your battery, LEDs are polarized so they have a positive and negative side.

**Maker Tape:** Maker Tape has nylon fibers combined with conductive materials that result in a strong and highly conductive tape.

**Disc Motor:** This type of small, flat motor has no external parts and instead uses a spring inside to create the movement.

**Switches:** In circuit diagrams, a switch is drawn as a "door" that opens and closes the circuit. Switches come in many different shapes and forms and can be found in every device with electricity.

**Tilt Switch:** A tilt switch opens and closes an electrical circuit based on its angle. When you hold the switch vertically the metal ball inside touches the conductive end, closing the circuit.

**Vibrating Motor:** This tiny DC (direct current) motor has an external shaft with an unbalanced weight on it. When that weight is rotated it wobbles, creating vibrations.

**Voltage:** Voltage is the electrical potential of a power source. You can think of it as a kind of electrical pressure created by the battery.

