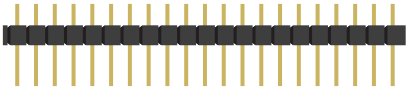
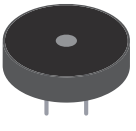


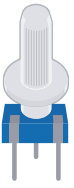
Male header pins - These pins fit into female sockets, like those on a breadboard. They help make connecting things much easier.

Optocoupler - This allows you to connect two circuits that do not share a common power supply. Internally there is a small LED that, when illuminated, causes a photoreceptor inside to close an internal switch. When you apply voltage to the + pin, the LED lights and the internal switch closes. The two outputs replace a switch in the second circuit.



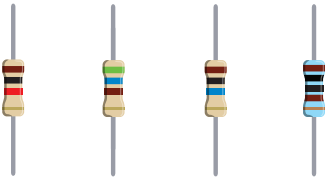
Piezo - An electrical component that can be used to detect vibrations and create noises.

Photoresistor - (also called a photocell, or light-dependent resistor). A variable resistor that changes its resistance based on the amount of light that falls on its face.



Potentiometer - A variable resistor with three pins. Two of the pins are connected to the ends of a fixed resistor. The middle pin, or wiper, moves across the resistor, dividing it into two halves. When the external sides of the potentiometer are connected to voltage and ground, the middle leg will give the difference in voltage as you turn the knob. Often referred to as a pot.

Pushbuttons - Momentary switches that close a circuit when pressed. They snap into breadboards easily. These are good for detecting on/off signals.



Resistors - Resist the flow of electrical energy in a circuit, changing the voltage and current as a result. Resistor values are measured in ohms (represented by the Greek omega character: Ω). The colored stripes on the sides of resistors indicate their value (see resistor color code table).