Hands-on Training: C with Electronics.

Gathering Hardware

We will need the following pieces of hardware to complete the various projects we'll be working on.



The Arduino Uno

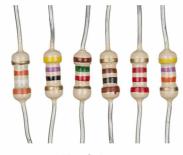
Arduino is an open-source electronics platform based on easy-to-use hardware and software. Arduino boards are able to read inputs - light on a sensor, a finger on a button, or a Twitter message - and turn it into an output - activating a motor, turning on an LED etc.



The power adapter, canpower your Arduino when it is not attached to your computer.

12 Volt/1A Power Adapter

Resistors, limit the flow of current in a circuit.



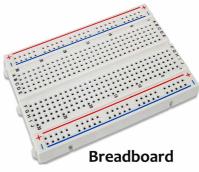
Resistors

A USB A-B cable connects the Arduino to a computer so you can program it. It will also provide power.



USB A-B Cable

A 9-volt battery can provide power when the Arduino is not attached to a computer.



An electronics breadboard is actually referring to a solderless breadboard. These are great units for making temporary circuits and prototyping, and they require absolutely no soldering.

A potentiometer is a three terminal resistor with a sliding or rotating contact that forms an adjustable voltage divider.

If only two terminals are used, one end and the wiper, it acts as a variable resistor or rheostat.



Potentiometers (Trim Pot)



Life must continue. And continue towards perfection, through progress, evolution, through self-initiative. Impatience can not lead to do that. Frustration is its enemy.