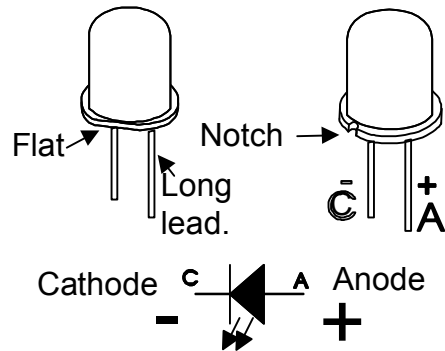


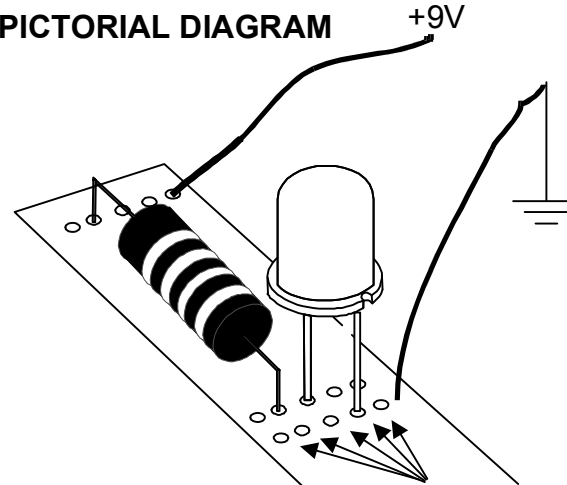
A DIODE works like a one way gate for a current of electrons. Electrical current will flow when the cathode terminal of the diode is negative (-) and the anode terminal is positive. Current will not flow when the connections are reversed.

A Light Emitting Diode will give off light when a current flows through it.

Light Emitting Diode



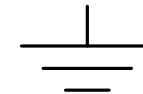
PICTORIAL DIAGRAM



The five holes are connected together and allow five conductors to be connected in common.

REVISIONS		

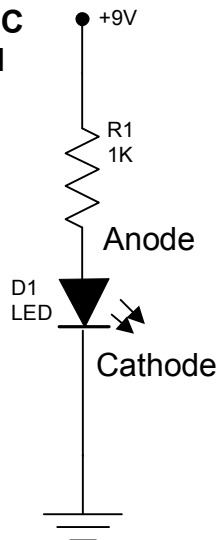
Common or Ground



All parts that end with this symbol are connected together. This is the other terminal of the battery or power source, also.

SCHEMATIC DIAGRAM

This is a series circuit that makes the LED operate. The resistor must be used to keep the LED from burning out. Demonstrate diode action by changing the direction of the LED.



The resistor reduces the flow of electrical current. It is hard for a current of electrons to flow through a resistance.

Resistor



1K=1,000Ω
Color Code
Brown, Black, Red



1. Read and study this page. Make schematic and pictorial drawings to use when making the circuit.
2. Use a proto type board to connect the parts as shown.
3. When the circuit works, unplug the LED and plug it back it after turning it so the leads are reversed. Is it on or off?
4. Unplug the LED and plug it back in so it works.
5. Write a conclusion about what happened to the LED.

TITLE		
Light Emitting Diode Simple Series		
DATE	SCALE	Parallax BS2 program provided.
3-21-2010	none	
DRAWN BY	PAGES	www.robo-works.net
Paul Ashley	1 of 1	