LESSON 12
Simple Circuit on a SCB

Watch video Lesson 12

Step 1 - Get out the solderless circuit board, a red LED, a 470 ohm resistor, and a 9-volt battery snap.

Step 2 - Insert the LED with, the beveled edge on the left side.

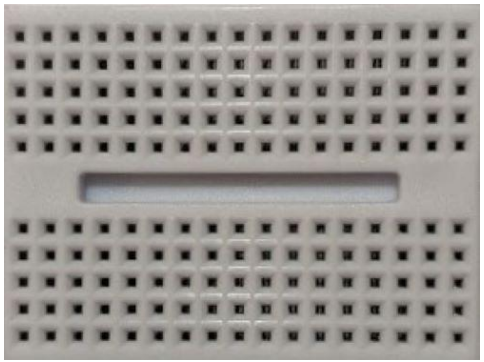
Step 3 - Insert the leads of the 470 ohm resistor. (Since resistors do not have polarity, it does not matter which way you plug it into the board.)

Step 4 - Insert the battery snap leads as shown.

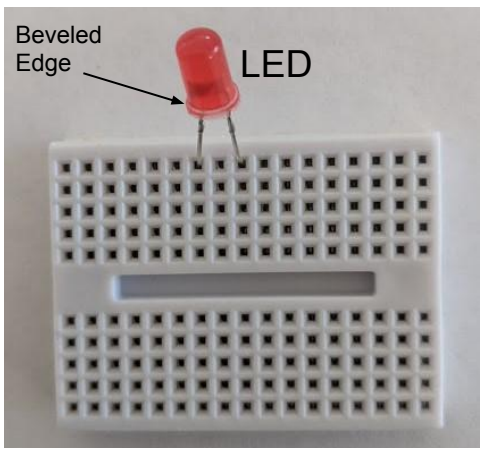
Step 5 - Connect a 9-volt battery and observe the brightness of the LED. (If the LED does not light, check your connections.)

Practice Quiz

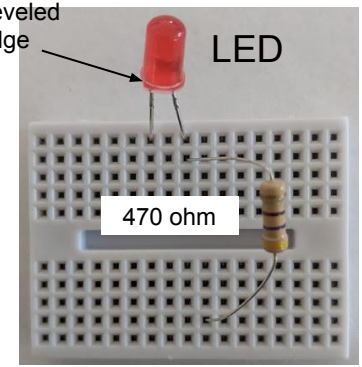
#1 Get **S**olderless **C**ircuit **B**oard



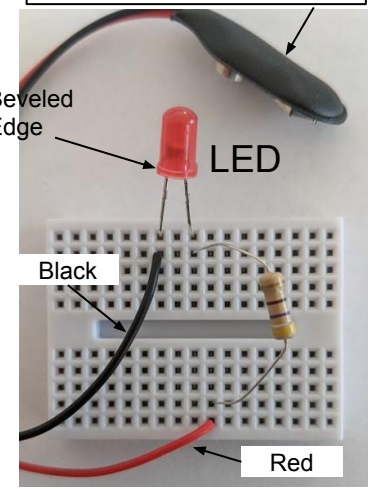
#2 Install the red LED



#3 Install the 470 ohm resistor



#4 Install the 9 volt Snap



Answer these questions	Activity Page	Simple circuit on a Solderless Circuit Board	12b

(1) Are the black wire of the 9-volt snap and the beveled edge side of the LED plugged into the same group of 5 holes?

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(2) Are both leads of the LED plugged into the same group of 5 holes?

_____

(3)Does the 470 ohm resistor have polarity?

_____

(4) Does this red LED have polarity?

_____

(5) True or False? Even if you connect the 'long lead' of the LED to the negative (or black lead of the battery snap), it will still light up.

_____

(6) The red lead of the battery snap is connected to the:

_____

(7) True or False? One side of the 470 ohm resistor is connected to the 'long lead' on the LED and the other side is connected to the black wire of the battery snap.

_____

(8) If you can't determine which lead is the 'short lead' on an LED, look for the _____ edge to find the Cathode or negative side of the LED?

_____

(9) True or False? This red LED will work just fine if it is connected directly across the 9-volt battery.

_____

(10) Did your LED light up when you connected a 9-volt battery to the circuit?

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