

## LESSON 10

## Connecting a simple circuit

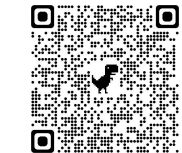
Watch video  
Lesson 10

Here we see pictures of 3 electronic components, i.e. the LED, the resistor, and the battery snap for the 9-volt battery.

We show all three components soldered together.

We could solder the circuit like this **but** we are going to show you how to build this and other circuits using a **solderless circuit board**.

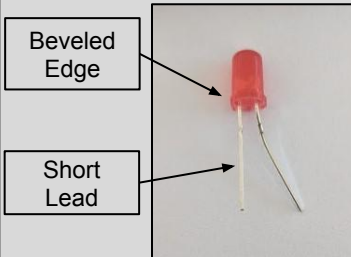
These techniques are used by technicians and engineers everyday to try out new circuits.



Practice Quiz

## Pictures of components

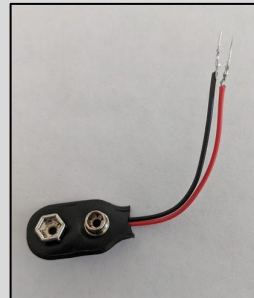
LED



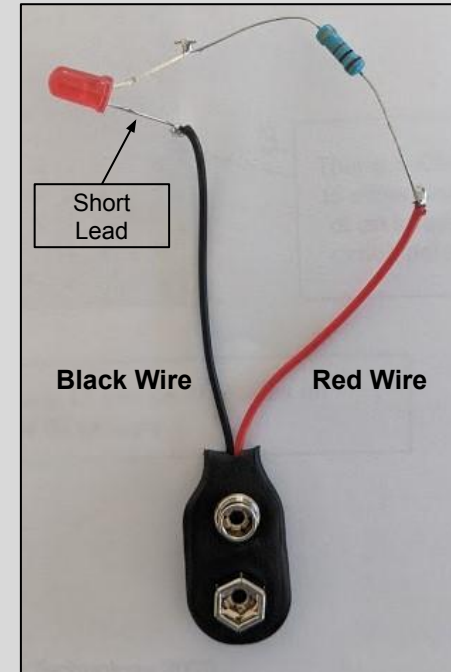
470 ohm Resistor



9-volt snap



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Complete simple circuit  
connected with solderComponents  
Soldered

Answer these questions

## Activity Page Lab 1201

Connecting a simple circuit with solder

10b

(1) In this lesson, what has been used to connect the components together?

\_\_\_\_\_

(2) What are we going to use instead of soldering our circuit together?

\_\_\_\_\_

(3) What are the four colors on the resistor in this circuit which is 470 ohms at +/- 5%?

- (a) \_\_\_\_\_
- (b) \_\_\_\_\_
- (c) \_\_\_\_\_
- (d) \_\_\_\_\_

(4) Is the 'beveled edge' on the same side of the LED as the 'short lead'?

\_\_\_\_\_

(5) What color is the battery snap wire that is connected to the 'short lead' on the LED?

\_\_\_\_\_

(6) True or False? An LED has polarity, which means it matters which side of the battery is connected to the LED.

\_\_\_\_\_

(7) True or False? If you connect the LED wrong, it will not light up because it has polarity.

\_\_\_\_\_

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(8) In this lab, you are not going to solder the connections, instead you are going to use a:

\_\_\_\_\_

(9) Technicians and engineers use solderless circuit boards to allow them to build circuits without the use of:

\_\_\_\_\_

(10) Is learning about electronics fun for you?

\_\_\_\_\_

