LESSON 28
Measuring Current with 6800 Ω

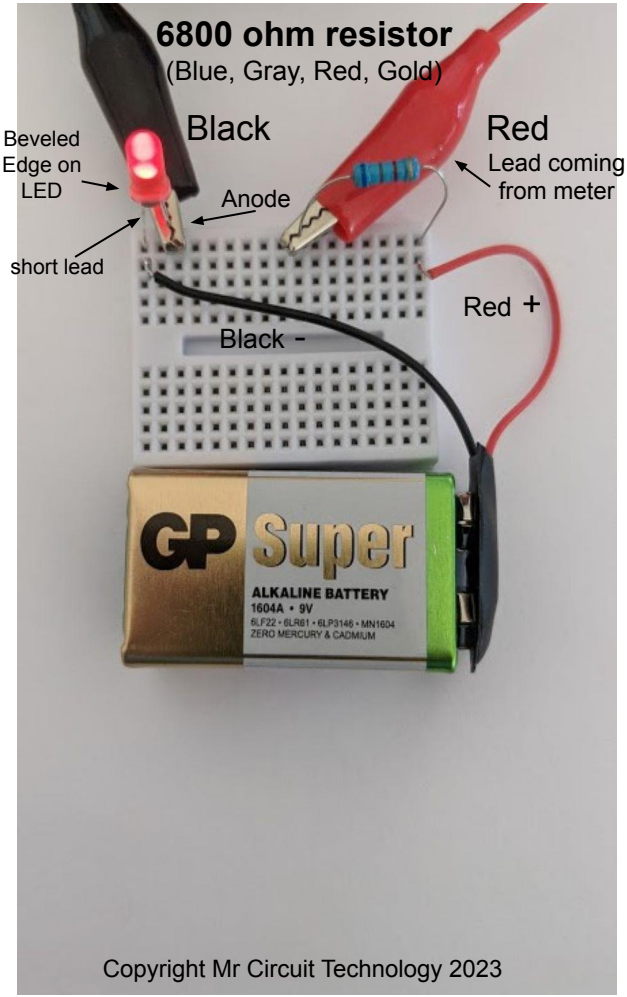
Using the meter setup procedure as explained in Lesson 23, build this circuit with a 6800 ohm resistor and measure the current.

Use the picture on the right to help you build the circuit. Use meter probe tips instead of alligator clips to complete the circuit.

As you touch the tips to the circuit, observe the meter display to see how much current is flowing.

Our meter shows 1.11 mAmps. How much current is flowing in "your" circuit?

_____mAmps



Multimeter set up as an Ammeter to measure current (on 20 mA scale)

showing 1.11 mA of current flowing

Practice Quiz 28

Answer these questions	Activity Page	Comparing the current in a circuit with 6800 Ω	28b

(1) Are the short lead and the beveled edge, on an LED, on the same side of the LED?

_____

(2) What color lead is connected to the COM on the multimeter?

_____

(3) What color lead is connected to the V Ω mA jack?

_____

(4) If we use the nominal value for the battery as 9V and the resistor as 470 ohms and the LED as 111 ohms (2V/0.018A), what should the amount of current flowing in the circuit be? R total = 470 + 111 = 581
Hint: I = E/R I = 9/581

_____

(5) What is maximum amount of current the meter can read when it is on this position or scale?

_____

(6) True or False? The more ohms in the series circuit, the dimmer the LED.

_____

(7) True or False? Lessons 26, 27 and 28 demonstrate that as the ohms change in a series circuit, it affects the amount of current flowing in the circuit?

_____

(8) If you give an LED too much voltage causing too much current to flow, the LED will probably:?

_____

(9) How many **milliAmps** is it showing on the multimeter display on page 28a?

_____

(10) How many **milliAmps** was showing on your multimeter display when you built this new circuit?

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