

LESSON 23

Verify current is the same

Watch video
for Lessons
23-24



Now rebuild the circuit, according to the schematic on the right.

Step#1: Build the circuit on a Solderless CB but do not connect the meter into the circuit yet.

Step#2: With the meter turned OFF, set the dial position to **20 mA**.

Step#3: Insert the Black meter lead into the **COM** socket and the Red meter lead into the **V Ω mA** socket.

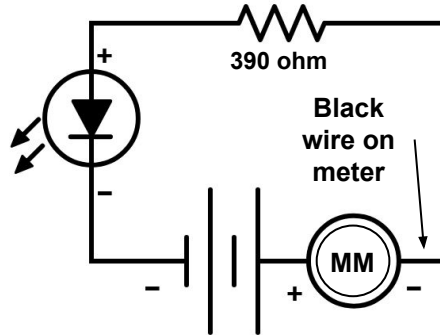
Step#4: Turn the meter **ON**.



Practice Quiz 23

Measure current flowing between resistor and the battery.

Circuit Schematic

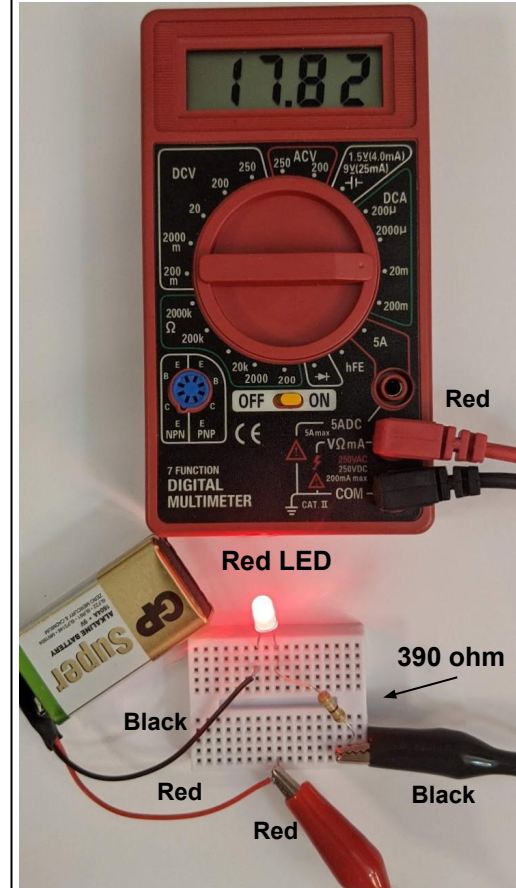


Step#5: The circuit is still incomplete, or open, until you touch the Red probe tip to the Red battery wire and the Black probe tip to one side of the resistor (as shown, in the picture on the right, by the Red and Black alligator clips).

The LED should light up and the meter display will read the amount of current.

Your meter display should show approx. 18 mA. or 0.018 Amps) Our meter shows 17.82 mA. or 0.01782 Amps.

Insert the MM into the circuit as shown and read the display.



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Answer these questions	Activity Page	Comparing the current in a different place in the circuit	23b
<p>(1) Is the same amount of current flowing in your circuit as in Lesson 22?</p> <p>_____</p> <p>(2) In this experiment, the black lead of the multimeter is plugged into the _____ jack?</p> <p>_____</p> <p>(3) One side of the 390 ohm resistor is connected to the Anode of the red LED and the other side is connected to the black probe _____.</p> <p>_____.</p> <p>(4) Did you have to change the dial position on your meter to do this experiment?</p> <p>_____</p>	<p>(5) Do the multimeter leads have to stay connected to the circuit if you want the LED to remain lit?</p> <p>_____</p> <p>(6) If the battery is weak, will the same amount of current flow in the circuit?</p> <p>_____</p> <p>(7) True or False?: In this lesson, the red probe tip of the multimeter is connected to the red wire of the battery snap.</p> <p>_____</p> <p>(8) When you first turn ON the meter in the 20 mA position, what is showing on the display?</p> <p>_____</p> <p>Copyright Mr Circuit Technology 2023</p>	<p>(9) How many milliAmps is it showing on the multimeter display on page 23a?</p> <p>_____</p> <p>(10) How many milliAmps was showing on your multimeter display when you built this new circuit?</p> <p>_____</p>	