LESSON 27 Measuring Current with 3300 Ω

Using the meter setup procedure as explained in Lesson 23, build this circuit with a 3300 ohm resistor and measure the current.

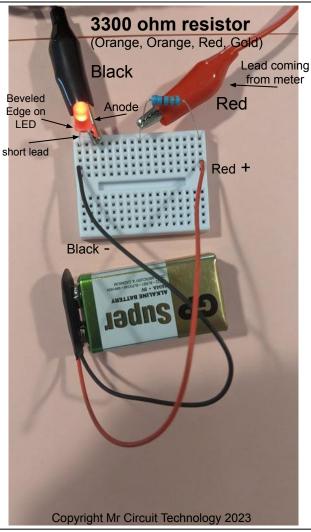
Use the picture on the right to help you build the circuit. Use meter probe tips instead of alligator clips to complete the circuit.

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

Our meter shows 2.29 mAmps. How much current is flowing in "your" circuit?

mAmps





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



showing 2.29 mA of current flowing

Comparing the current in a **Activity Page** 27b **Answer these questions** circuit with 3300 Ω (5) True or False? Our multimeter is (1) As we are adding more (9) How many milliAmps is it ohms to the circuit, is the LED connected in parallel with the showing on the multimeter display on page 27a? getting more bright? circuit? (6) Is the red meter probe tip (10) How many **milliAmps** was (2) Which resistance caused showing on your multimeter display connected to the Anode of the LED? the LED to be brighter, 470 when you built this new circuit? ohms or 3300 ohms? (7) If we reverse the LED leads, will (3) Is 3.3k ohms another way the LED light up? **Ammeter** of saying 3300 ohms? (Black Lead on Meter) (Red Lead on Meter) **LED** (8) True or False? The beveled edge Resistor on an LED indicates the Cathode of (4) As your battery gets weaker, the LED will get the LED. **Battery** Copyright Mr Circuit Technology 2023