

Learning Intentions

- Learn how to make resistor circuits on a breadboard.
- Learn how to measure the voltage of resistors in a circuit
- Learn how to calculate the current through a resistor

Procedure

1. Get a packet of 5 resistors and a breadboard from the teacher.
2. Measure the resistance of each resistor with a multimeter.
3. Draw a circuit that uses all 5 resistors and a 3V battery. The more complex the circuit, the higher the mark.
4. Make the circuit using the breadboard and the resistors.
5. Have the teacher approve your circuit (i.e. make sure there are no short circuits), and show you how to use the DC power supply to provide 3 V for the circuit.
6. Attach the power supply to the circuit with a supply voltage of 3V.
7. Measure the voltage across each resistor.
8. Calculate the current through each resistor.

Data, Calculations, and Schematic

Draw the schematic for your circuit using 5 resistors (R1 through R5) and 1 3V battery (B1).

Mr. Renwick's Science 9
Lab - Resistor Circuits

Record the resistance, voltage, and current for each of your resistor in the table below.

Resistor	Resistance (Ω)	Voltage (V)	Current (A)
R1			
R2			
R3			
R4			
R5			