**Series vs. Parallel**

**Purpose**

You will also discover the difference between series and parallel connections, and how to measure voltage and current in a circuit. In doing so, you will gain a better understanding of how electricity flows through the wires of a circuit.

|  |  |
| --- | --- |
| **Materials** | **Amount** |
| Battery | 1 |
| Resistors | 2 |
| Wires | ------- |
| Breadboard | 1 |
| Digital Multimeter | 1 |

**Experimentation: Part 1**

Design a data-collection sheet on which you can record any measurements or observations based on the goals listed below. Then using the equipment provided, try to complete the following.

* Measure a resistence
* Measure a voltage
* Measure a current

**Experimentation: Part 2**

Based on the class discussion and your experience in Part 1, design a new data-collection sheet for the tasks below. Now do the following.

* Predict the difference between series and parallel connections.
* Test your predictions and record the results.
* Calculate the power of the resistors and record the results.

**Summary**

1. Analyze and summarize the results of your experiment.
2. Describe what you have learned about electric circuits from this activity.