



Parallel Circuits

Activity 1

In your notebook, draw a circuit with a battery, an ammeter, a switch, two resistors, and a voltmeter. The voltmeter should be connected in parallel with one of the resistors. Draw a circuit that is similar to the one shown in Figure 1. Use the same components as in Figure 1.

Observe the circuit as a parallel circuit. For the circuit in the battery, the voltage measured from the voltmeter is the total voltage. If you change the resistance and voltage, use a similar procedure to determine the total voltage.

Activity 2

1. Use the parallel circuit shown in Figure 2 to answer questions 1-4.

1. What is the voltage across each resistor?
2. What is the voltage of each branch?
3. What is the total current provided by the battery?
4. Use a voltmeter to measure the voltage across each resistor and the total voltage. Compare the total voltage of the circuit.



2. Use the parallel circuit shown in Figure 3 to answer questions 1-4.

1. What is the voltage across each resistor?
2. What is the voltage of each branch?
3. What is the total current provided by the battery?
4. Use a voltmeter to measure the voltage across each resistor and the total voltage. Compare the total voltage of the circuit.



3. Use the parallel circuit shown in Figure 4 to answer questions 1-4.

1. What is the voltage across each resistor?
2. What is the voltage of each branch?
3. What is the total current provided by the battery?
4. Use a voltmeter to measure the voltage across each resistor and the total voltage. Compare the total voltage of the circuit.



4. Use the parallel circuit in Figure 5 to answer questions 1-4.

1. What is the voltage across each resistor?
2. What is the voltage of each branch?
3. What is the total current provided by the battery?

