1. A series circuit contains only _____ path for the electric current to flow.

   a) one   b) two   c) three

2. If a break occurs in a series circuit, the flow of the current will stop _____ along the path of the circuit.

3. If you know the voltage and resistance of the circuit, you may use _____ Law to calculate the current in a series circuit.

4. You may _____ the individual resistances in a series circuit to obtain the total resistance.

   a) multiply   b) add   c) divide

5. What is a voltage drop?

6. If power is lost as a current flows through a resistor (a light bulb, for example), how does the circuit regain the power to continue to light the bulb?

7. Define Kirchhoff's voltage law.

8. Why do we use parallel instead of series circuitry in houses?

9. Define Kirchhoff's current law.

10. Sketch the picture of the parallel circuit with 2 batteries and three light bulbs at the bottom of the page. Include labels and arrows.

11. The _____ is the same across each branch of a parallel circuit.

a) resistance   b) voltage   c) current

12. The total current in a parallel circuit is the sum of the _____ in each branch.

a) resistance   b) voltage   c) currents

13. The total resistance in a parallel circuit is _____ than in a series circuit.

14. Create a table that compares the differences between current, resistance, and voltage in a series and parallel circuit.

15. When a large amount of current flows through a branch with little or no resistance is called a _____ _____.