Quiz Week 9 NAME_____

Answer each of the following

1. What is Ohm's Law? The relationship between voltage (volts), current (amps) and resistance (ohms) in a circuit.

2. What is a circuit? A closed loop with a source of electrical energy, a load (or something using electricity). All circuits have resistance to the flowing of electrons.

3. Voltage is? The potential electrical difference between two points.

4. Current is? The flow of electrons from high potential to lower potential energy. Current always follows the path of least resistance.

5. Resistance is? Representative of how easily current flows in the system.

6. What is the formula for Ohm's Law? V=IR or Voltage = Current x resistance

7. What is a milliamp? 1/1000 of an ampere.

8. Draw a circuit with a LED light and a resistor that matches a 15 mA LED light. Varies

9. Why must a circuit have a resistor if the voltage drop is less than the required current? All the available current must be used in the circuit.

10. Why does a circuit need a maximum power rating? A maximum power rating is necessary because excess power leads to excess heating and overheating of the system.