**Elementary and Middle VOC Worksheet**

1. What does it mean when your LED light is on/off?

2. Column 2 on the breadboard is connected to one leg of the sensor and the \_\_\_\_\_\_\_ row.

3. Column 3 on the breadboard is connected to one leg of the sensor and the \_\_\_\_\_\_\_ row.

4. Column 4 on the breadboard is connected to one leg of the sensor and the \_\_\_\_\_\_\_ row.

5. Column 5 on the breadboard is connected to one leg of the sensor and the \_\_\_\_\_\_\_ row.

6. When the VOC sensor detects a pollutant, the Voltage across the resistor \_\_\_\_\_\_\_\_\_.

7. A battery is connected to a light bulb in a circuit. There is a current (I) of 3 Amps in the wire. The light bulb has a resistance (R) of 2 Ohms. What is the voltage of the battery? (Use V = I x R).

8. A battery is connected to a light bulb in a circuit. There is a current (I) of 5 Amps in the wire. The battery has a voltage (V) of 10 Volts. What is the resistance (R) of the battery? (Use R = V/I).

9. A battery is connected to a light bulb in a circuit. The battery has a voltage of 6 Volts. The light bulb has a resistance (R) of 3 Ohms. What is the current (I) in the wire? (Use I = V/R).