Equipment

- Dust Sensor
- Arduino and Laptop
- Candles and lighters for testing

Sensor Worksheet No. 3

Baseline readings

In order to be able to know what to look for, we need a baseline reading and a second test reading to understand what our data is going to mean. Below, take a few measurements in the room with nothing else in the air, and record what the average reading in the room is in both a percentage ratio and pcs/L. Once the average reading in the room is taken, use your testing equipment to take measurements with degraded air going into the sensor and report the averages once more.

What is the average reading in the room? _____ %
_____ pcs/L

Using the testing equipment:
What is the average reading with the candle? _____ %
_____ pcs/L

Hypothesis Specific Design

Now that you understand more about the sensor and its operation, think about the sensor's limitations and any environmental conditions that affect your hypothesis or how you collect your data.

What do you want to do with the data you collect, and is there any other data that might be important to write down when you collect it?

_____

_____

_____

What limitations or conditions might affect your gas sensor measurements?

_____

_____

_____

Share your thoughts with your group and circuits mentor, and make design changes!