

Particulate Matter in My Home

By Mr. Alewine

Introduction and Background

- One aspect of air pollution is measuring particulate matter. This simply refers to how many small, solid objects there are floating around in the air.
- I decided to do an experiment to test how much particulate matter was in the air at my house.
- To do this, I will test three different locations around my house. I will do this for two days, measuring the results each day.

Hypothesis

- I think that the dining room will end up having the most particulate matter because our dog likes to sleep in that room.

Materials Used

- Tape
- Index cards
- Scissors
- Pen (to mark cards)

Procedure

step 1: construction

- First, I took three index cards and cut out the middle of each of them. I then stuck tape in the middle, sticky side up. This allows it to catch any particulate matter floating around.

Procedure

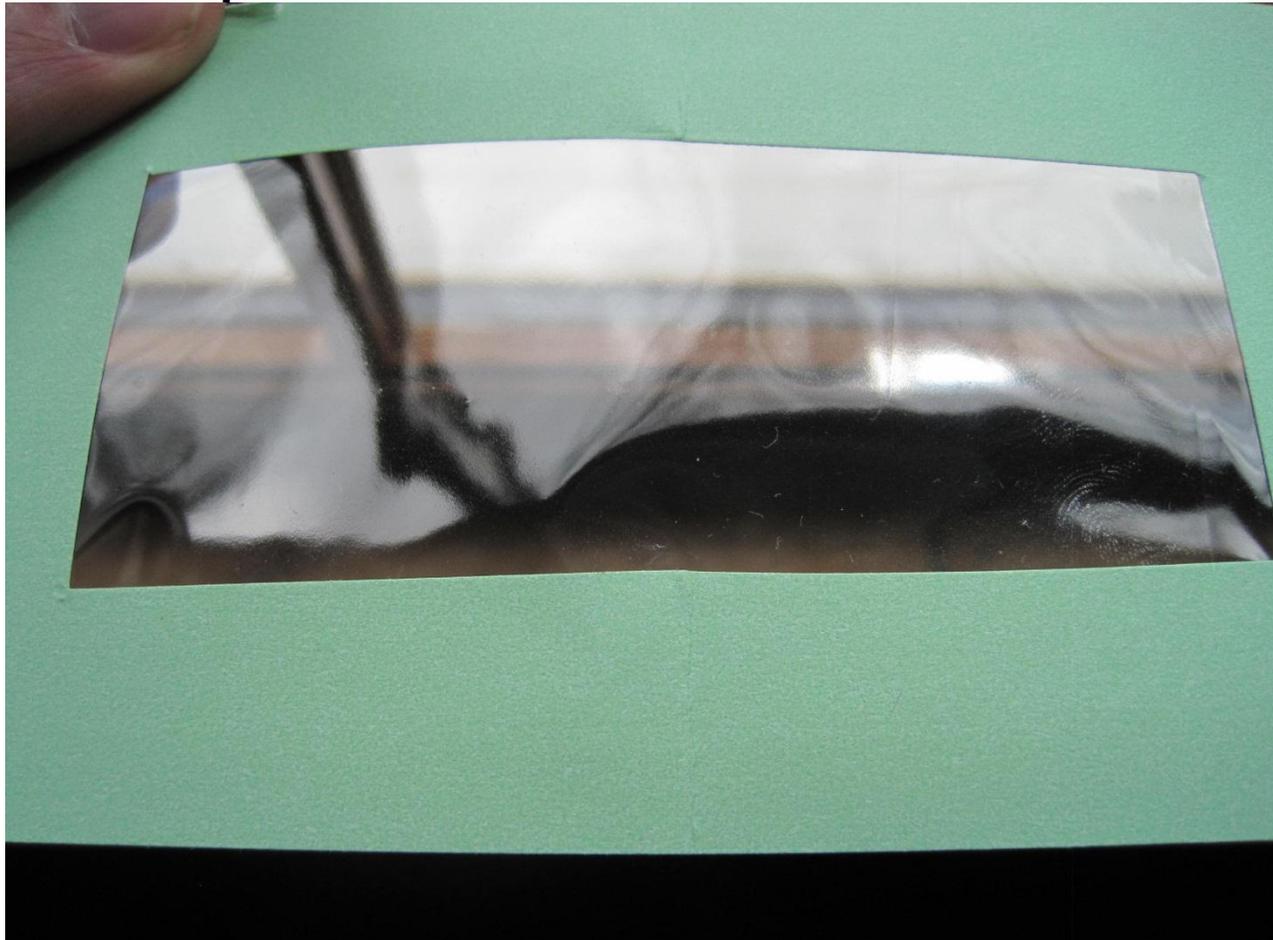
step 2: placement

- I then selected three areas around the house: an upstairs bedroom, a downstairs living room (above the fireplace), and the downstairs dining room. I made sure to put the index cards in locations that would be safe from any disruptions or tampering.
- The following pictures will show the cards over the course of the experiment....

Procedure

step 3: measurement

- Day 0 - fireplace



Procedure

step 3: measurement

- Day 0 – dining room



Procedure

step 3: measurement

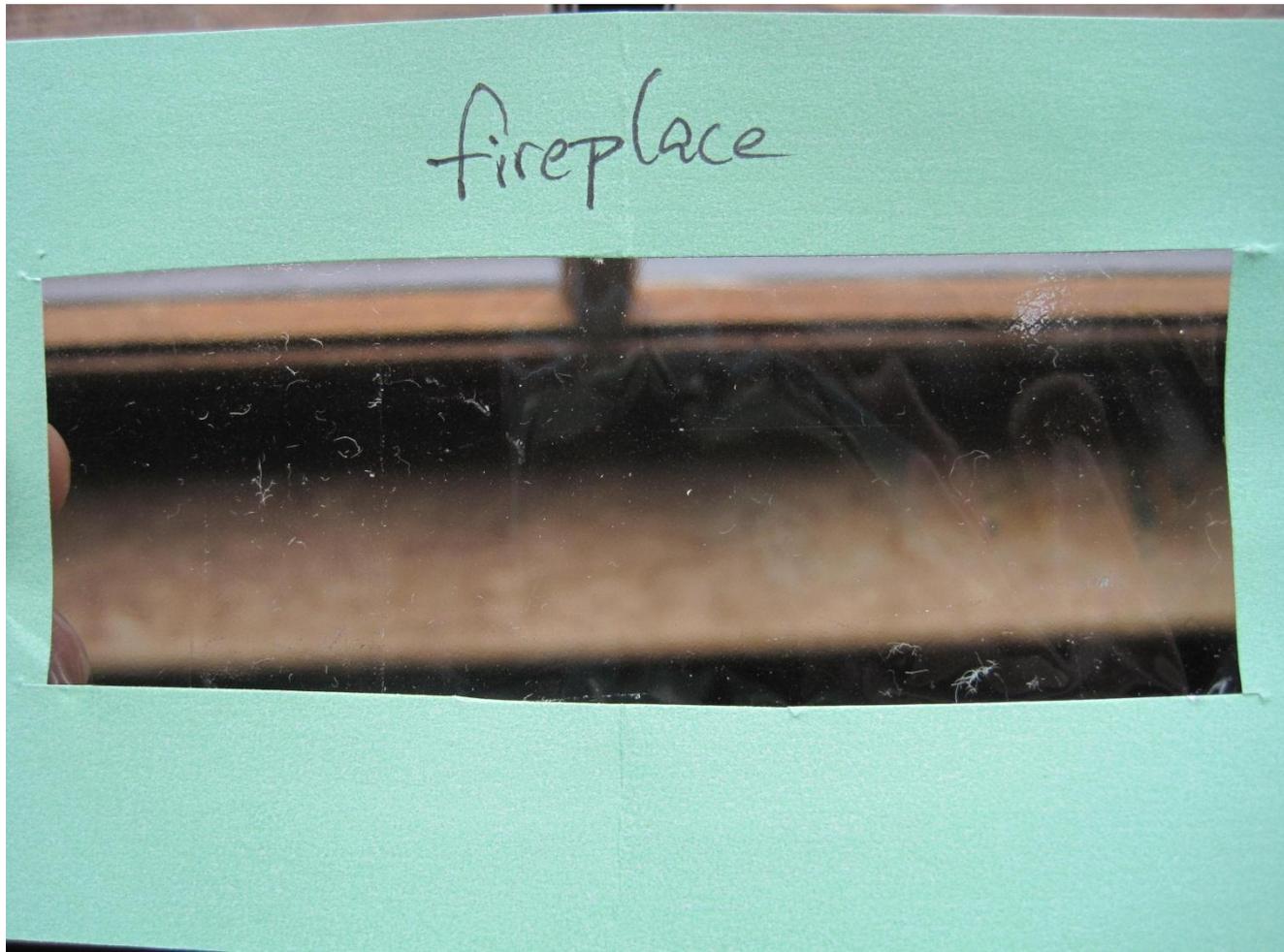
- Day 0 – bedroom



Procedure

step 3: measurement

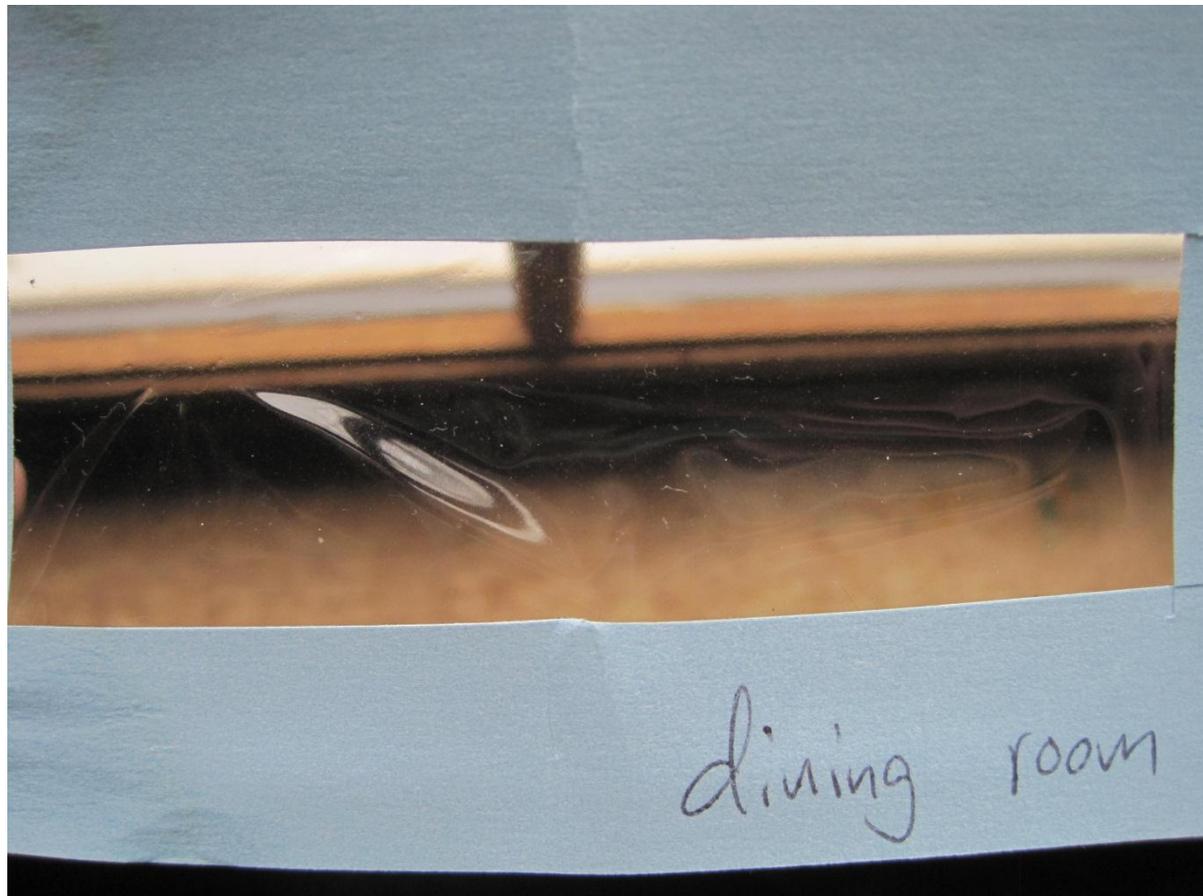
- Day 1 - fireplace



Procedure

step 3: measurement

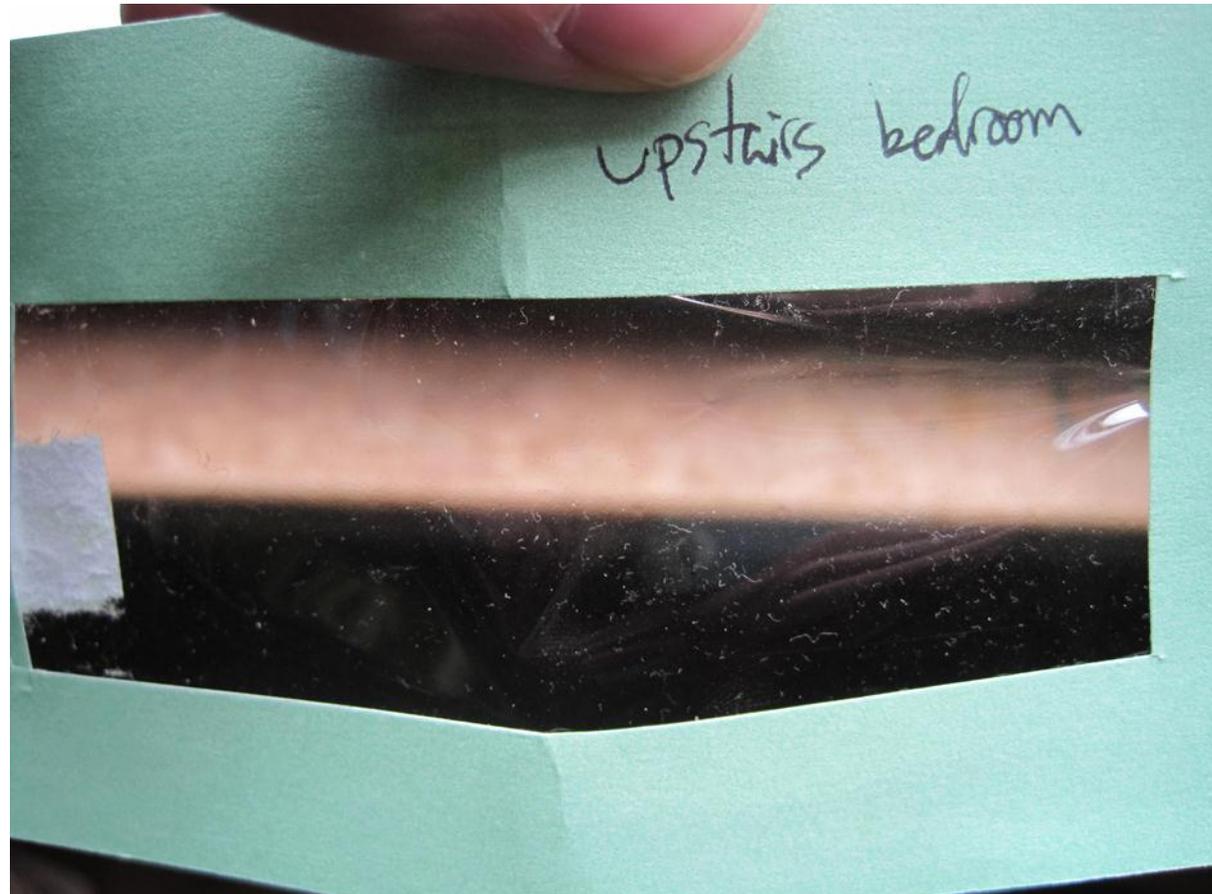
- Day 1 – dining room



Procedure

step 3: measurement

- Day 1 – bedroom



Procedure

step 3: measurement

- Day 2 - fireplace



Procedure

step 3: measurement

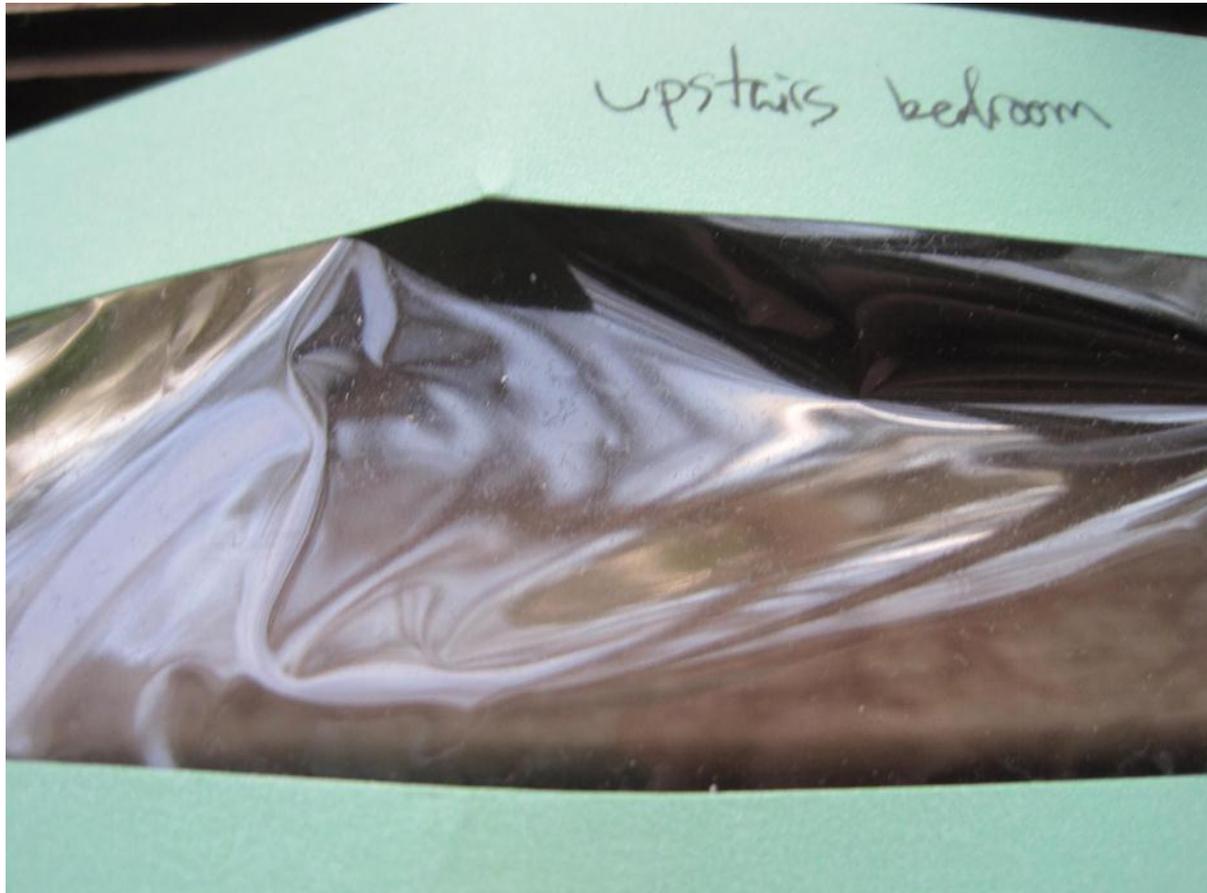
- Day 2 – dining room



Procedure

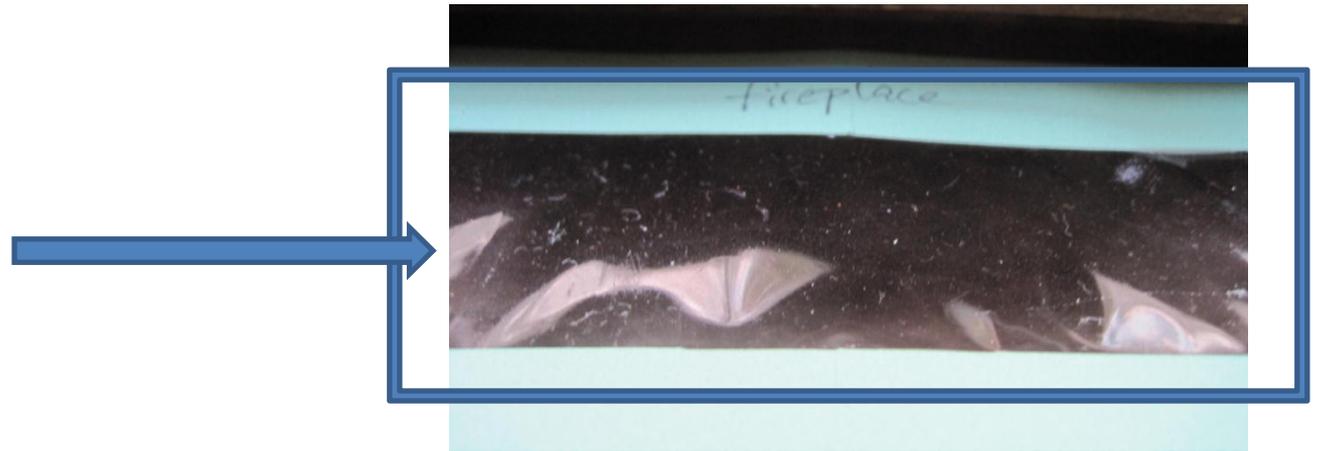
step 3: measurement

- Day 2 – bedroom



Analyzing Results

- As you can see from the pictures, over the course of two days the card that was above the fireplace picked up the most dust and other bits of matter.



Conclusion

- The den – which is where the fireplace is located – is the most polluted room in my house, because it had the most particulate matter.