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## Descriptors of Contaminants

- Chlorinated benzenes (also known as  
dry cleaners) - type of disinfectants  
common in US - toxic carcinogens

- Large part of org. remaining the elevated  
top of the hill (800 vol)  
→ used to hold organic

- CO<sub>2</sub> Reader - digital, rectangular  
→ reads % of CO<sub>2</sub> in the ambient environment  
(ppm)

## Procedure

1. All the waterbombs on the waterbombs list were gathered.
2. A 500 ml jar was taken & set clean on a table where there is sunlight near.
3. Then the already bought algae (Chlorella vulgaris) were placed into the jar, while being spread out evenly. 300 ml of water was poured into the 500 ml jar.
4. A picture of the algae was then taken to set up a starting point for the algae growth, a random count rack was also used to measure the percentage of CO<sub>2</sub> in the jar.
5. The information for both of those jars including the mass measurements for the water and algae were written on data tables.
6. Over the course of each week, the algae were observed for any growth, and the % of CO<sub>2</sub> for each of those 14 days was written on a data table.

7. At the end of each week the % of  $CO_2$  and algae growth by plate was compared to the present and past %s.

8. At the end of the experiment, many factors were calculated and excluded that could've caused the experiment to be any less successful.

## Materials List

Type of algae: growing algae

- Chlorella limosa (also known as green chlorella)  
dark green, spherical, compact, microalgae, live

Large Jars: used to hold algae & amount of 10, 100

- Glass jars

steel top, clear, medium jars (2500ml, 24-25 x 24 cm)

Custom Plastic Miter: used to read % of  
10, 100 jar

- digital, rectangular

## Data Tables

Before experiment

### Mass Measurements

- Jar<sup>1</sup>: 0.05g (initial on bottom)
- Jar<sup>2</sup>: 149.31g (w/ 300 ml of water)
- Jar<sup>3</sup>: 153.48g (w/ 300 ml of water + 4.2 g of algae)

First Day Measurement / Starting out percentage

Thursday 0/13

CO<sub>2</sub> reading = 448 ppm

parts per million

## First week of experiment

Date	Percentage	Description of appearance
1/25	525 ppm - 120 ppm	clear water
1/26	470 ppm - 495 ppm	clear water
1/28	512 ppm - 418 ppm	clear water
1/31	551 ppm - 536 ppm	cloudy water
2/1	416 ppm - 521 ppm	precipitation forming
2/2	506 ppm - 548 ppm	cloudy water
2/3	535 ppm - 506 ppm	cloudy water & some white

second week of experiment

Date	Percentage	Description of ice volume
2/4	493 ppm	cloudy water
2/7	500.5 ppm	condensation forming
2/8	526 ppm	condensation
2/9	400 ppm	cloudy condensation
2/10	451 ppm	increasing cloudy
2/11	434 ppm	increasing cloudy condensation
2/14	442.3 ppm	increasing cloudy condensation



# Pictures from experiment

Before experiment

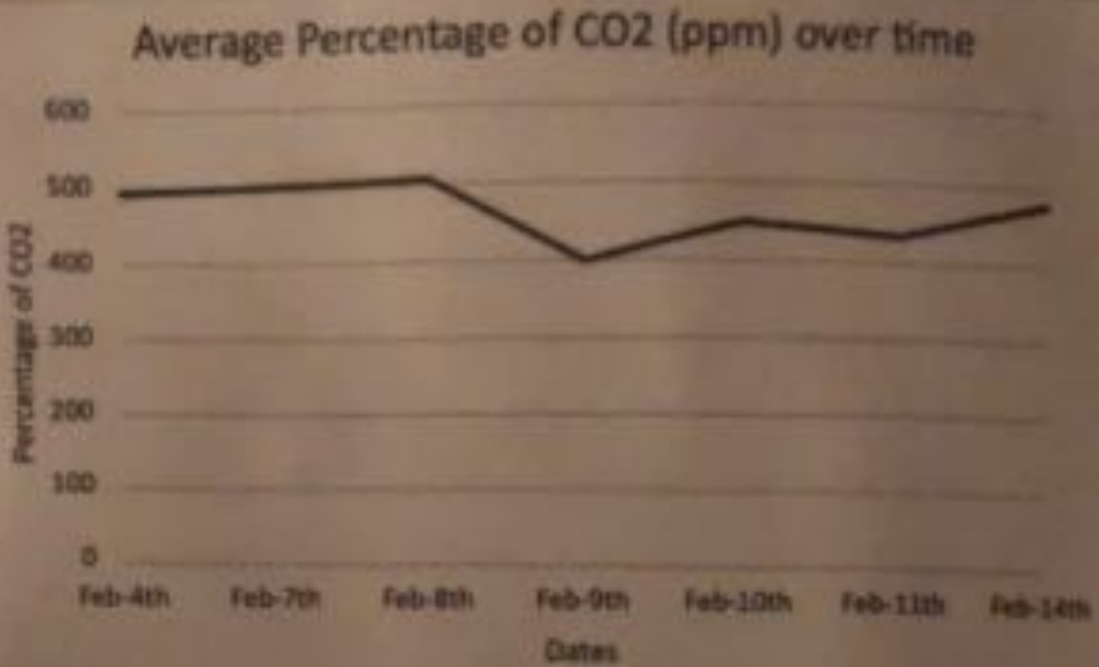


First week of experiment

Average Percentage of Co<sub>2</sub> (ppm) over time



second week of experiment



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After Experiment

