

Name:

Date:

CO₂ in enclosed spaces

Objective:

In this experiment, we're measuring how our breath increases CO₂ levels in an enclosed space. We'll also learn the importance of ventilation.

Group members:

Location of experiment:

Prediction

Before you start, make some predictions.

1. What do you think will happen to the CO₂ levels as time passes? I predict CO₂ levels will

Increase steadily / spike quickly / stay the same (circle one)

Why do you think this will happen?

Experiment setup

Dependent variable (what are we measuring?) _____

Independent variable (what are we changing?) _____

Controlled variables (everything else that we'll keep the same?) _____

Data Collection

Use the table below to record your CO₂ levels over time.

Time (minutes)	CO ₂ level (ppm)	Observations (e.g., temperature, feeling of stuffiness, etc.)
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Name:

Date:

CO₂ in enclosed spaces

Results

1. What happened to the CO₂ levels over time?

2. Did the room feel different after a few minutes? Describe any changes.

3. Was your prediction correct? Why or why not?

Discussion questions

1. Why do you think the CO₂ levels increased in the room?

2. What could happen to the air quality in a car with multiple passengers and no ventilation?

3. What strategies can we use to reduce CO₂ levels in enclosed spaces?

Extension Activity:

Change 1 variable to change the experiment. For example, how does the number of people in the room affect CO₂ levels? How does the activity level of people affect CO₂ levels? How does the amount of ventilation affect CO₂ levels?
