

		
	<p>CHANGING FOR CLIMATE CHANGES</p>	

## Experiment 7: plants convert carbondioxide into oxygen

### 1. INTRODUCTION

Forests are considered the lungs of the planet because plants provide the creation of oxygen gas. During photosynthesis, with the help of light, water and  $\text{CO}_2$  are converted into sugars and  $\text{O}_2$ . And we need that oxygen to live.

### 2. ORIENTATION

A candle needs  $\text{O}_2$  to burn. While burning, the candle produces  $\text{CO}_2$ . So if we cover the candle, the  $\text{CO}_2$  that is generated will extinguish the candle since there is no  $\text{O}_2$  enough. Can a plant, covered together with the candle, help the candle to burn longer?

### 3. PREPARATION

#### 3.1. Materials:

- 2 candles or tealights
- 1 plant
- 1 fake plant (or something else), about the same volume as the real plan
- 1 or 2 glass goblets, big enough for the candle and the plant

- chronometer

**3.2. Method:**

- Burn the candle and put it next to the plant.
- Cover plant and candle with the glass goblet.
- Make sure that no air can enter the goblet.
- Chronometre how long it takes for the candle to be extinguished.
- Repeat this with the fake plant instead of the real one (or if you have 2 goblets, you can do it simultaneously to see the difference)

**4. RESULTS**

**Observations:**

Compare the time needed for the candle to be extinguished.

In a fake plant, the extinguishing time of the candle is 1:14 minutes. In the real plant, that extinguishing time of the candle is 1:38 minutes.

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**5. REFLECTION**

Can you make the connection between this experiment and the need of more woods combating global warming? Yes, we can make a connection. If there are more trees, there will be more oxygen

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## 6. e-book

Take several pictures during the experiment. You can also film it.