

## DOES A PLANT CONSUME MORE CO<sub>2</sub> THAN IT RELEASES?

The absorption of carbon dioxide by plants is a known process. Plants absorb carbon dioxide from the air through their leaves and convert it into sugars and other organic molecules using energy from sunlight. This process also produces oxygen, which is released into the air. Plants can then store carbon in the form of plant material, which can help reduce the amount of greenhouse gases in the atmosphere. This is because when plants die and decompose, the carbon they have stored is slowly released into the soil and can be stored as organic matter for longer periods. For this reason, forests and other types of green spaces are often seen as important "carbon sinks" in the fight against climate change.

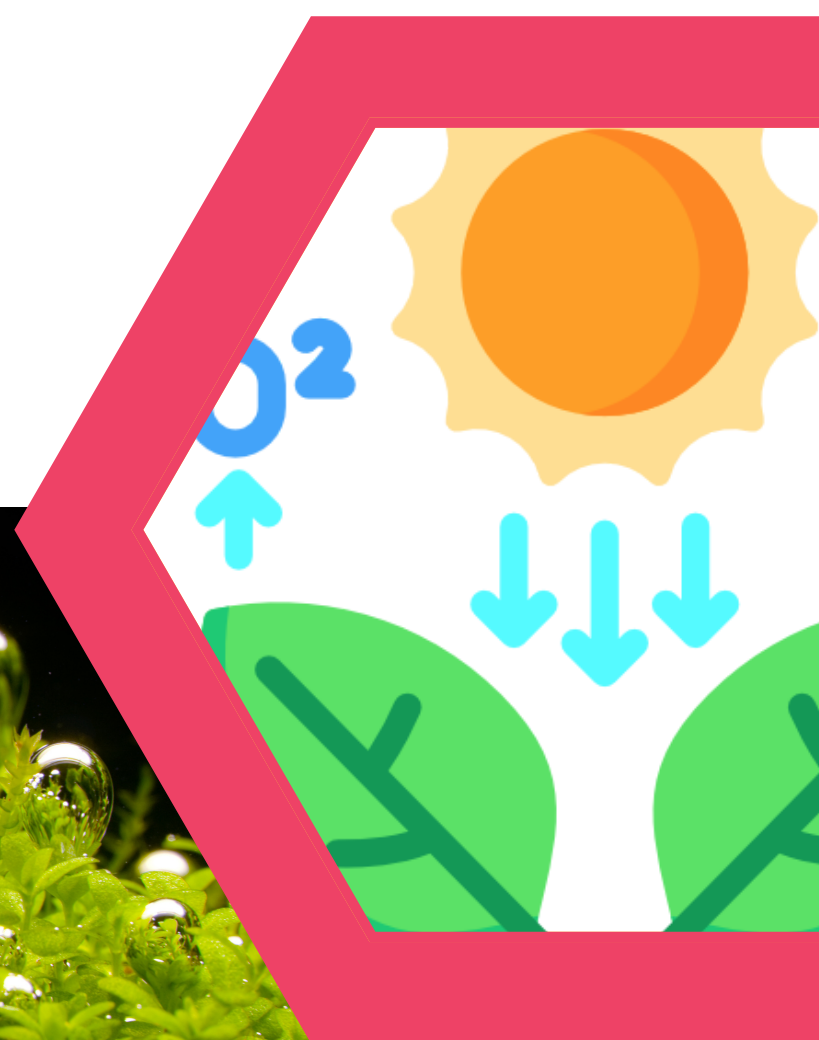
**Can you develop a solution to understand and observe the process of carbon dioxide absorption by plants?**



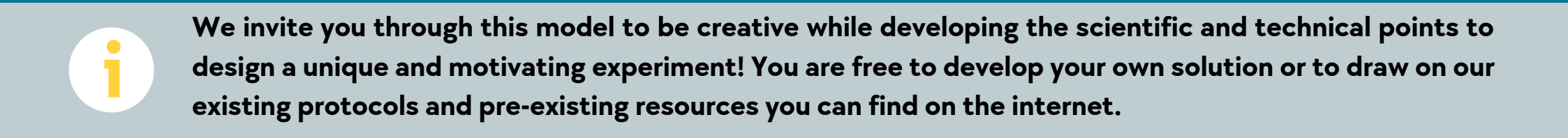
Name your team / Name of the participants:


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## DEFINE YOUR SCIENTIFIC EXPERIMENT



 We invite you through this model to be creative while developing the scientific and technical points to design a unique and motivating experiment! You are free to develop your own solution or to draw on our existing protocols and pre-existing resources you can find on the internet.

## ORIENTATION

Briefly introduce your experiment, the issues addressed, the learning objectives. Define the problem to be solved, what are the learning objectives?

## INTERDISCIPLINARITY

Discipline	Concept addressed through the protocol

## CONCEPTUALISATION

Formulate a hypothesis to answer the given problem.

## INVESTIGATION

Describe the steps needed to answer your hypothesis. You could use the following steps as a guide: collect the data and use sensors, display the data, make it accessible, analyse the data and conclude, use the data to propose one or more solutions.

Identify the knowledge mobilised during this phase, identify the learnings acquired, reflect on what you have gained as competencies, knowledge and skills.