

# Gas Exchange in Plants

Use this worksheet after reading the lesson to practise the key ideas and prove you can meet the success criteria.

Name \_\_\_\_\_

Date \_\_\_\_\_

Class \_\_\_\_\_

## 1. Key Ideas

Plants exchange gases with the environment too. This lesson focuses on leaves and surface features as the main sites of gas exchange, and explains why plant surfaces matter for survival.

- plants exchange gases with the environment
- plants do not need lungs to exchange gases

## 2. Success Criteria

By the end, you should be able to:

- plants exchange gases with the environment
- leaves are key structures in plant gas exchange
- surface features help leaves exchange gases effectively

## 3. Key Terms

### Gas exchange

The movement of gases between an organism and its environment.

### Leaf surface

The outer area of the leaf where exchange with the environment can occur.

### Environment

The surroundings outside an organism.

### Surface feature

A part of an external surface that helps a structure do its job.

### Oxygen

A gas involved in living processes in plants and animals.

### Carbon dioxide

A gas exchanged between plants and the environment.

## 4. Activity: Build the Lesson Map

Use the lesson to complete the table. Keep answers brief but specific.

Prompt	Your answer
Main concept	
Important example	
Common mistake to avoid	
How this links to the next lesson	

## 5. Short Answer Questions

1. Explain this lesson goal in your own words: "plants exchange gases with the environment". Use one specific example from the lesson.

CORE

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2. Apply this idea to a new example: "leaves are key structures in plant gas exchange". Show your reasoning clearly.

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3. Analyse why this idea matters for understanding Gas Exchange in Plants: "surface features help leaves exchange gases effectively".

REASONING

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## 6. Extend: Apply the Idea

**A student says, "I understand Gas Exchange in Plants because I memorised the definition."**

Explain why memorising a definition is not enough. Use an example from the lesson to show deeper understanding.

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## 7. Multiple Choice

1. What is the best first step when answering a question about Gas Exchange in Plants?

- A. Identify the key concept being tested
- B. Write every fact from memory
- C. Ignore the command word
- D. Skip examples and evidence

2. Which answer would show stronger understanding of Gas Exchange in Plants?

- A. An answer with accurate terms and reasoning
- B. A copied definition only
- C. A single-word response
- D. An answer with no example

3. What should you do if a question asks you to explain?

- A. Link the idea to a reason or cause
- B. List unrelated facts
- C. Only draw a diagram
- D. Write the shortest possible answer

## 8. Success Criteria Proof

Finish with evidence that you can do each success criterion.

### SUCCESS CRITERION 1

**Prove that you can: plants exchange gases with the environment**

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### SUCCESS CRITERION 2

**Prove that you can: leaves are key structures in plant gas exchange**

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### SUCCESS CRITERION 3

**Prove that you can: surface features help leaves exchange gases effectively**

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**One thing I still need help with:**

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