

# Plant Transport - Roots, Stems and Leaves

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 need organised transport too. This lesson explains, at Stage 4 depth, how roots take in water and dissolved substances, how stems help move them through the plant, and how leaves are involved in both use and loss.

- roots take in water and dissolved substances
- plant transport can be described as uptake, movement and loss

## 2. Success Criteria

By the end, you should be able to:

- roots take in water and dissolved substances
- stems help move substances through the plant
- leaves are involved in both use and loss of water

## 3. Key Terms

### Uptake

The taking in of substances from the environment.

### Dissolved substances

Substances mixed into water, such as minerals taken up by roots.

### Transport

The movement of substances through an organism.

### Loss

The movement of substances out of an organism.

### Root

A plant structure that absorbs water and minerals and helps anchor the plant.

### Stem

A plant structure that supports the plant and helps connect roots and leaves.

## 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: "roots take in water and dissolved substances". Use one specific example from the lesson.

CORE

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2. Apply this idea to a new example: "stems help move substances through the plant". Show your reasoning clearly.

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3. Analyse why this idea matters for understanding Plant Transport - Roots, Stems and Leaves: "leaves are involved in both use and loss of water".

REASONING

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## 6. Extend: Apply the Idea

**A student says, "I understand Plant Transport - Roots, Stems and Leaves 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 Plant Transport - Roots, Stems and Leaves?

- 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 Plant Transport - Roots, Stems and Leaves?

- 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: roots take in water and dissolved substances**

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### SUCCESS CRITERION 2

**Prove that you can: stems help move substances through the plant**

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### SUCCESS CRITERION 3

**Prove that you can: leaves are involved in both use and loss of water**

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

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