

Water Quality Parameters & Standards

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

A river can look clear and still be chemically stressed. In NSW water management, chemists do not rely on appearance alone. They monitor parameters such as conductivity, dissolved oxygen, pH and coliform bacteria to decide whether water is safe for ecosystems, agriculture and human use.

- The major physical, chemical and biological parameters used to assess water quality
- Why no single measurement is enough to judge water quality fully

2. Success Criteria

By the end, you should be able to:

- The major physical, chemical and biological parameters used to assess water quality
- How these parameters are measured and what they indicate
- The role of guidelines such as the Australian Drinking Water Guidelines

3. Key Terms

decide whether water

safe for ecosystems, agriculture and human use

sample would you predict

healthier for aquatic life, and what measurements would you want before making a final judgement?

How these parameters

measured and what they indicate

Why no single measurement

enough to judge water quality fully

with high density that

toxic to organisms even at low concentrations

Clean water

water with no dissolved substances at all

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: "The major physical, chemical and biological parameters used to assess water quality". Use one specific example from the lesson.

BAND 3 **2 MARKS**

2. Apply this idea to a new example: "How these parameters are measured and what they indicate". Show your reasoning clearly.

BAND 4 **3 MARKS**

3. Analyse why this idea matters for understanding Water Quality Parameters & Standards: "The role of guidelines such as the Australian Drinking Water Guidelines".

BAND 5 **4 MARKS**

6. Extend: Apply the Idea

BAND 5/6

5 MARKS

A student gives a memorised answer about Water Quality Parameters & Standards but does not use evidence or reasoning.

Improve the answer by writing a stronger response that uses accurate terminology, a relevant example and a clear explanation.

7. Multiple Choice

1. What is the best first step when answering a question about Water Quality Parameters & Standards?

- 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 Water Quality Parameters & Standards?

- 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: The major physical, chemical and biological parameters used to assess water quality

BAND 3 **2 MARKS**

SUCCESS CRITERION 2

Prove that you can: How these parameters are measured and what they indicate

BAND 4 **3 MARKS**

SUCCESS CRITERION 3

Prove that you can: The role of guidelines such as the Australian Drinking Water Guidelines

BAND 5 **4 MARKS**

One thing I still need help with:
