CHEMISTRY YEAR 11 - MODULE 3 - LESSON 7

Metal Activity Series & Reactions of Metals

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

The Sydney Harbour Bridge is painted every year to stop it rusting — but the zinc bolts holding the steel panels together corrode first and are replaced regularly. Understanding why zinc sacrifices itself to protect iron is exactly what this lesson is about.

- Key facts and terms for Metal Activity Series & Reactions of Metals
- How the main ideas in Metal Activity Series & Reactions of Metals connect

2. Success Criteria

By the end, you should be able to:

- Key facts and terms for Metal Activity Series & Reactions of Metals
- Where this lesson fits in Module 3
- How the main ideas in Metal Activity Series & Reactions of Metals connect

3. Key Terms

Passivation
The formation of a protective oxide layer on a metal surface that prevents further reaction.

Synthesis reaction
A reaction where two or more reactants combine to form a single product.

Decomposition reaction
A reaction where a single compound breaks down into simpler substances.

Precipitation reaction
A reaction in which an insoluble solid forms when two solutions are mixed.

Combustion reaction
A rapid reaction with oxygen producing heat, light and oxides.

Redox reaction
A reaction involving electron transfer between chemical species.

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: "Key facts and terms for Metal Activity Series & Reactions of Metals". Use one specific example from the lesson.

BAND 3 2 MARKS

2. Apply this idea to a new example: "Where this lesson fits in Module 3". Show your reasoning clearly.

BAND 4 3 MARKS

3. Analyse why this idea matters for understanding Metal Activity Series & Reactions of Metals: "How the main ideas in Metal Activity Series & Reactions of Metals connect".

BAND 5 4 MARKS

6. Extend: Apply the Idea

BAND 5/6 5 MARKS

A student gives a memorised answer about Metal Activity Series & Reactions of Metals 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 Metal Activity Series & Reactions of Metals?

☐ 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 Metal Activity Series & Reactions of Metals?

☐ 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: Key facts and terms for Metal Activity Series & Reactions of Metals

BAND 3 2 MARKS

SUCCESS CRITERION 2

Prove that you can: Where this lesson fits in Module 3

BAND 4 3 MARKS

SUCCESS CRITERION 3

Prove that you can: How the main ideas in Metal Activity Series & Reactions of Metals connect

BAND 5 4 MARKS

One thing I still need help with: