SCIENCE YEAR 8 - UNIT 2 - LESSON 12

Groups, Periods and Locating Elements

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

This lesson teaches students how to navigate the periodic table using groups, periods, names, symbols and atomic numbers.

- groups are vertical columns
- position helps comparison

2. Success Criteria

By the end, you should be able to:

- groups are vertical columns
- periods are horizontal rows
- elements can be located by name, symbol or atomic number

3. Key Terms

Key idea
The central concept from Groups, Periods and Locating Elements.

Evidence
Information, observations or calculations used to support an answer.

Explain
Give a reasoned answer that links cause and effect.

Apply
Use a learned idea in a new example, problem or scenario.

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: "groups are vertical columns". Use one specific example from the lesson.

CORE

2. Apply this idea to a new example: "periods are horizontal rows". Show your reasoning clearly.

CORE

3. Analyse why this idea matters for understanding Groups, Periods and Locating Elements: "elements can be located by name, symbol or atomic number".

REASONING

6. Extend: Apply the Idea

A student says, "I understand Groups, Periods and Locating Elements because I memorised the definition."

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

7. Multiple Choice

1. What is the best first step when answering a question about Groups, Periods and Locating Elements?

☐ 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 Groups, Periods and Locating Elements?

☐ 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: groups are vertical columns

SUCCESS CRITERION 2

Prove that you can: periods are horizontal rows

SUCCESS CRITERION 3

Prove that you can: elements can be located by name, symbol or atomic number

One thing I still need help with: