SCIENCE YEAR 8 - UNIT 2 - LESSON 10

Comparing Atomic Models and Their Usefulness

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 closes the atomic-model block by comparing what different models explain well and why simple models are still worth using.

- different atomic models explain different features
- usefulness is not the same as perfect realism

2. Success Criteria

By the end, you should be able to:

- different atomic models explain different features
- all models have strengths and limitations
- classroom models are simplified on purpose

3. Key Terms

Key idea
The central concept from Comparing Atomic Models and Their Usefulness.

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: "different atomic models explain different features". Use one specific example from the lesson.

CORE

2. Apply this idea to a new example: "all models have strengths and limitations". Show your reasoning clearly.

CORE

3. Analyse why this idea matters for understanding Comparing Atomic Models and Their Usefulness: "classroom models are simplified on purpose".

REASONING

6. Extend: Apply the Idea

A student says, "I understand Comparing Atomic Models and Their Usefulness 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 Comparing Atomic Models and Their Usefulness?

☐ 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 Comparing Atomic Models and Their Usefulness?

☐ 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: different atomic models explain different features

SUCCESS CRITERION 2

Prove that you can: all models have strengths and limitations

SUCCESS CRITERION 3

Prove that you can: classroom models are simplified on purpose

One thing I still need help with: