PHYSICS YEAR 11 - MODULE 2 - LESSON 8

Power

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

An athlete and a walker climb the same stairs. They do the same work. But the athlete does it in 4 seconds — the walker takes 40. Same energy, very different power.

- P = ΔE/Δt — average power definition
- Why power and work are different quantities

2. Success Criteria

By the end, you should be able to:

- P = ΔE/Δt — average power definition
- P = Fv cosθ — power from force and velocity
- P = mgh/Δt — shortcut for vertical lifting

3. Key Terms

Key idea
The central concept from Power.

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: "P = ΔE/Δt — average power definition". Use one specific example from the lesson.

BAND 3 2 MARKS

2. Apply this idea to a new example: "P = Fv cosθ — power from force and velocity". Show your reasoning clearly.

BAND 4 3 MARKS

3. Analyse why this idea matters for understanding Power: "P = mgh/Δt — shortcut for vertical lifting".

BAND 5 4 MARKS

6. Extend: Apply the Idea

BAND 5/6 5 MARKS

A student gives a memorised answer about Power 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 Power?

☐ 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 Power?

☐ 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: P = ΔE/Δt — average power definition

BAND 3 2 MARKS

SUCCESS CRITERION 2

Prove that you can: P = Fv cosθ — power from force and velocity

BAND 4 3 MARKS

SUCCESS CRITERION 3

Prove that you can: P = mgh/Δt — shortcut for vertical lifting

BAND 5 4 MARKS

One thing I still need help with: