

LEARNAROO HUB

KS3 Science - Practice Paper A

Key Stage 3 | Science | 60 minutes | 34 marks

ORIGINAL PRACTICE PAPER

Name	
Date	
Score	/ 34

Instructions

Answer every question. Show working where it helps. If a question asks you to explain, use a complete sentence and include scientific or subject vocabulary. Check your answers when you finish.

This is an original Learnaroo practice paper. It is not an official exam-board paper and does not reproduce an official paper.

Question paper

1. Name the organelle where aerobic respiration occurs. [1]

2. Write the word equation for aerobic respiration. [3]

3. Explain how a root hair cell is adapted to absorb water and mineral ions. [3]

4. An atom has 11 protons and 12 neutrons. State its atomic number and mass number. [2]

5. Describe what happens to particles when a liquid freezes. [2]

6. Balance this equation: $__\text{Mg} + \text{O}_2 \rightarrow __\text{MgO}$. [2]

7. A solution has pH 3. Is it acidic, neutral or alkaline, and which ions are associated with acidity? [2]

8. Calculate speed when an object travels 150 m in 12 s. [3]

9. State the energy transfer when a battery powers a lamp. [2]

10. A 6 V supply produces a current of 0.5 A. Calculate resistance. [3]

11. Explain why sound cannot travel through a vacuum. [2]

12. State one independent, one dependent and one control variable for testing how wire length affects resistance. [3]

13. Explain natural selection using variation, competition and reproduction. [4]

14. A student records 9.8, 10.1, 15.7 and 10.0 seconds. Identify the anomaly and state what to do next. [2]
