GCSE Combined Science Exam Practice

Level: GCSE **Subject:** Science

Short exam-style questions covering Biology, Chemistry and Physics. Use key scientific vocabulary.

Biology

- Describe the function of the nucleus in a cell.
- Explain why diffusion is faster at higher temperatures.
- State two adaptations of alveoli for gas exchange.

Chemistry

- Describe the difference between an element and a compound.
- Explain why ionic compounds have high melting points.
- Balance: H2 + O2 -> H2O

Physics

- State the equation linking force, mass and acceleration.
- A 2 kg object accelerates at 3 m/s^2. Calculate the resultant force.
- Explain what happens to current when resistance increases and voltage stays the same.

Answer Guidance

Use this section for self-marking or tutor-led feedback. Award partial credit for correct method, clear reasoning and accurate use of terminology.

Answer Guidance

1. Nucleus contains genetic material and controls cell activities.
2. Particles have more kinetic energy and move faster.
3. Large surface area, thin walls, good blood supply.
4. Element has one type of atom; compound has chemically bonded different elements.
5. Strong electrostatic forces between oppositely charged ions require lots of energy.
6. 2H2 + O2 -> 2H2O
7. F = ma
8. 6 N
9. Current decreases.