

GRADE 10 | 2024

Grade 10 Physical Sciences Practice Exam

Physical Sciences

CAPS ALIGNED

GRADE 10 PHYSICAL SCIENCES PRACTICE EXAMINATION

Time: 3 hours

Marks: 150

INSTRUCTIONS:

- Answer ALL questions unless otherwise instructed.
- Show ALL working for full marks.
- This is a CAPS-aligned practice examination.

QUESTION 1: MECHANICS**1.1 (6 marks)**

A stone is dropped from a cliff 80 m high.

(a) How long does it take to reach the ground? ($g = 10 \text{ m/s}^2$)

(b) What is its velocity just before hitting the ground?

1.2 (4 marks)

Distinguish between a scalar and a vector quantity. Give ONE example of each.

1.3 (3 marks)

A car accelerates from 20 m/s to 35 m/s in 5 s. Calculate the acceleration.

QUESTION 2: MATTER AND CHEMISTRY**2.1 (6 marks)**

Name THREE sub-atomic particles and give the charge of each.

2.2 (6 marks)

Explain the difference between ionic and covalent bonding.

2.3 (4 marks)

Balance: $\text{C}_3\text{H}_8 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$

2.4 (4 marks)

Classify as exothermic or endothermic with a reason: (a) Burning candle (b) Photosynthesis
