EXAM PAPER

Chemistry Unit 1 & 2 — Practice Exam 2

PREVIEW
This file has the first 15 of the 30 questions in this paper. The rest is locked: it comes with a PrepNest plan, or with the paper itself for VCE.

Reading time: 15 minutes (no writing)
Writing time: 45 minutes
Total time: 60 minutes

SECTIONS IN THIS PAPER

- Chemistry — 45 min

INSTRUCTIONS

You are not permitted to write during reading time — you may only read the paper and plan your approach. Answer every question you can. Write your working in the space provided for long-answer questions. Marking guidance and full explanations are provided in the separate answer key.

Chemistry

45 minutes

1. Which of the following is NOT typically evidence that a chemical reaction has occurred?

A. A change of state alone (e.g. ice melting)

B. A colour change

C. A gas being produced

D. A temperature change

2. What are the correct coefficients to balance: __Fe + __O2 → __Fe2O3?

A. 2, 3, 1

B. 4, 3, 2

C. 1, 1, 1

D. 3, 4, 2

3. What is a catalyst?

A. A substance consumed in a reaction

B. A product of a reaction

C. A substance that speeds up a reaction without being consumed

D. A substance that slows a reaction

4. What does the law of conservation of mass state?

A. Mass is always created in a reaction

B. Mass is always destroyed in a reaction

C. Mass only applies to gases

D. Total mass of reactants equals total mass of products

5. CaCO3 → CaO + CO2 is an example of what type of reaction?

A. Combination (synthesis)

B. Decomposition

C. Displacement

D. Combustion

6. On the pH scale, a solution with pH 3 is best described as:

A. A strong base

B. A weak base

C. An acid

D. Neutral

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7. What does the formation of a precipitate during a reaction indicate?

A. An insoluble solid has formed from the reaction

B. A gas has escaped

C. The temperature has dropped

D. No reaction occurred

8. What are the correct coefficients to balance the combustion of propane: __C3H8 + __O2 → __CO2 + __H2O?

A. 1, 5, 3, 4

B. 1, 3, 3, 4

C. 2, 5, 3, 4

D. 1, 4, 3, 4

9. Which of the following does NOT affect the rate of a chemical reaction?

A. The colour of the container

B. Temperature

C. Concentration of reactants

D. Surface area of a solid reactant

10. Balance the following equation and state the type of reaction it represents: __Al + __O2 → __Al2O3

11. Explain the law of conservation of mass and show how it applies to the balanced equation 2H2 + O2 → 2H2O.

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12. Describe three observable signs that a chemical reaction has occurred, giving an example of each.

13. Write a balanced equation for the reaction between hydrochloric acid (HCl) and sodium hydroxide (NaOH), and name the products formed.

14. An atom of chlorine-37 has 17 protons. How many neutrons does it have?

A. 17

B. 20

C. 37

D. 54

15. What is the electronic configuration of a sulfur atom (atomic number 16)?

A. 2, 6, 8

B. 2, 8, 6

C. 2, 8, 8

D. 2, 8, 4, 2

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30.

15 questions locked, up to question 30.

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PREVIEW

That’s the end of the preview

You’ve seen the first 15 of the 30 questions in Chemistry Unit 1 & 2 — Practice Exam 2. The full paper is worth 30 marks.

STILL TO COME	QUESTIONS	MARKS
Chemistry	15	15

The full paper comes with

- Every question, printed exactly like the ones in this preview
- The complete answer key, with the working behind every mark
- A topic report after marking, showing what to practice next

Get the full paper at

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