ENGLAND GCSE CHEMISTRY OCR GATEWAY HIGHER · UNIT 1 · 10 QUESTIONS

# Particles — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button so it can be fixed.

**1** **Hardcover books are stacked on a table. What force pulls them down?**

- A tension
- B air resistance
- C gravity
- D friction

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**2** **Glass marbles are used to model atoms. What is a limitation of the model?**

- A marbles cannot be counted accurately at all
- B marbles are the wrong colour for atoms
- C marbles are much bigger than atoms
- D marbles are too small to see properly

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3 **A hot air balloon is filled with hot air. Why does it rise?**

- A hot air is less dense
- B hot air has no mass
- C hot air is colder
- D hot air is heavier than cold air

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4 **What did Dalton think an atom was?**

- A a tiny solid ball
- B a small nucleus with shells around it
- C a cloud of electrons with no centre
- D a ball of positive charge with electrons in it

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5 **What is the electronic structure of chlorine (atomic number 17)?**

A 2,8,7

B 2,8,8

C 2,8,6

D 2,7,8

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6 **A swimming pool is filled with water. What is the density of water?**

A about 1 kilogram per cubic metre

B about 10 kilograms per cubic metre

C about 1000 kilograms per cubic metre

D about 100 kilograms per cubic metre, roughly

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**7** **Do isotopes of the same element have the same mass number?**

- **A** no, their mass numbers differ
- **B** no, their proton numbers differ
- **C** yes, they are identical in every way
- **D** yes, their mass numbers are the same

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**8** **An atom of aluminium loses 3 electrons. What is the charge on the ion formed?**

- **A** +3
- **B** +2
- **C** -3
- **D** 0

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**9** An atom has 6 protons and 20 neutrons. What is its mass number?

- A 6
- B 20
- C 26
- D 28

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**10** An element is in period 4 of the periodic table. How many electron shells do its atoms have?

- A 5
- B 6
- C 3
- D 4

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## ANSWER KEY

1. C
2. C
3. A
4. A
5. A
6. C
7. A
8. A
9. C
10. D

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