ENGLAND GCSE PHYSICS AQA FOUNDATION · UNIT 4 · 10 QUESTIONS

Atomic Structure — 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 to let Brett know so he can fix it.

1 **A calculator runs on a small current. What is current measured in?**

- A ohms, the unit of resistance
- B watts, the unit of power
- C volts, the unit of voltage
- D amperes

Understand It with Pulse | Flag a mistake

2 **Hardcover books have mass. What is mass measured in?**

- A kilograms
- B joules
- C watts
- D newtons, the unit of force

Understand It with Pulse | Flag a mistake

3 **Glass marbles are shaken in a tray. What does this model?**

A particles gaining energy

B particles freezing into place

C particles disappearing completely

D particles bonding together

Understand It with Pulse | Flag a mistake

4 **Which type of radiation is stopped by aluminium?**

A alpha

B neutron

C beta

D gamma

Understand It with Pulse | Flag a mistake

5 **In alpha decay, what happens to the atomic number of the nucleus?**

A it stays the same

B it rises by 2

C it falls by 2

D it falls by 4

Understand It with Pulse | Flag a mistake

6 **Where does nuclear fusion happen naturally?**

A in a battery

B in a light bulb

C in the Sun and stars

D in a car engine, like petrol

Understand It with Pulse | Flag a mistake

7 **A sample's activity halves every 100 years. After 200 years, what fraction of the original activity remains?**

- A 1
- B 1/4
- C 1/8
- D 1/2

Understand It with Pulse | Flag a mistake

8 **A radioactive sample has an activity of 1600 Bq. What is its activity after 2 half-lives?**

- A 800 Bq
- B 200 Bq
- C 400 Bq
- D 1600 Bq

Understand It with Pulse | Flag a mistake

9 **An atom has a mass number of 23 and an atomic number of 11. How many neutrons does it have?**

- A 14
- B 13
- C 12
- D 11

Understand It with Pulse | Flag a mistake

10 **A wristwatch is used to time a race. What is speed calculated from?**

- A mass and time together
- B distance only, not time
- C distance and time
- D time only, not distance

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.