ENGLAND GCSE COMBINED SCIENCE AQA TRILOGY HIGHER · UNIT 8 · 25 QUESTIONS

Atomic Structure and the Periodic Table — 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 **An ice cream cone melts. What is the melting point of the ice cream?**

- A around 37 degrees Celsius
- B around 0 degrees Celsius
- C around 100 degrees Celsius
- D around minus 20 degrees Celsius

Understand It with Pulse | Flag a mistake

2 **A hot air balloon rises because the air inside it is less dense than the air outside. What happens to the density of air when it is heated?**

- A it stays the same
- B it becomes zero
- C it increases
- D it decreases

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3 **Silver coins are made of a metal. Which property do metals have?**

- A they conduct electricity
- B they do not conduct electricity at all
- C they dissolve in water
- D they are brittle

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4 **Glass marbles in a tray are used as a model for particles in a solid. What do the marbles show?**

- A particles move freely through space
- B particles are far apart from each other
- C particles flow past each other easily
- D particles vibrate in fixed positions

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5 **A thermometer measures temperature in degrees Celsius. What is the freezing point of water on this scale?**

- A 32
- B 100
- C 0
- D 10

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

A kilograms

B newtons, the unit of force

C watts

D joules

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7 **Which group contains the alkali metals?**

A Group 2

B Group 0

C Group 7

D Group 1

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8 **What is the electronic structure of oxygen (atomic number 8)?**

- A 2,4
- B 2,6
- C 2,8
- D 2,7

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9 **Which of these is a property of transition metals?**

- A they form coloured compounds
- B they have low melting points
- C they do not conduct electricity
- D they are very soft

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10 An atom has 12 protons and 18 neutrons. What is its mass number?

- A 18
- B 12
- C 32
- D 30

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11 An atom has atomic number 8 and mass number 16. How many electrons does it have?

- A 8
- B 6
- C 16
- D 24

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12 **Which particle has a positive charge?**

A the electron

B the proton

C the neutron

D the nucleus

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13 **What is a period in the periodic table?**

A a group

B a column

C a block

D a row

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14 **Which electronic structure is a noble gas?**

A 2,8,1

B 2,6

C 2,8,8

D 2,8,7

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15 **Which transition metal is used as a catalyst in the Haber process?**

A nickel

B iron

C copper

D platinum

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16 **An atom has 19 protons and 10 neutrons. What is its mass number?**

A 10

B 29

C 19

D 31

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

A 12

B 6

C 0

D 18

Understand It with Pulse | Flag a mistake

18 **Which of these is a typical property of a metal?**

- A it is dull
- B it does not conduct heat
- C it is brittle
- D it conducts electricity

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19 **How many electrons are in the outer shell of a Group 1 element?**

- A 8
- B 1
- C 7
- D 2

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20 **An atom has 8 protons and 18 neutrons. What is its mass number?**

- A 18
- B 8
- C 28
- D 26

Understand It with Pulse | Flag a mistake

21 **What does the atomic number tell you?**

- A the number of neutrons
- B the number of electrons and neutrons
- C the mass of the atom
- D the number of protons

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22 **What is the centre of an atom called?**

A the electron shell

B the neutron

C the proton

D the nucleus

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23 **Which of these is a non-metal?**

A copper

B sodium

C sulfur

D iron

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24 **Which group contains the noble gases?**

- A Group 7
- B Group 1
- C Group 2
- D Group 0

Understand It with Pulse | Flag a mistake

25 **An atom has 17 protons and 12 neutrons. What is its mass number?**

- A 12
- B 17
- C 31
- D 29

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	B	**10.**	D	**19.**	B
2.	D	**11.**	A	**20.**	D
3.	A	**12.**	B	**21.**	D
4.	D	**13.**	D	**22.**	D
5.	C	**14.**	C	**23.**	C
6.	A	**15.**	B	**24.**	D
7.	D	**16.**	B	**25.**	D
8.	B	**17.**	A		
9.	A	**18.**	D		

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