ENGLAND GCSE COMBINED SCIENCE AQA TRILOGY HIGHER · UNIT 10 · 25 QUESTIONS

Quantitative Chemistry — 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 **A chocolate cake is baked. Is baking a chemical change?**

- A no
- B yes
- C never
- D sometimes

Understand It with Pulse | Flag a mistake

2 **Lemons taste sour. What does sour taste show?**

- A an acid is present
- B an alkali is present
- C a metal is present
- D a salt is present

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

A gravity

B tension

C air resistance

D friction

Understand It with Pulse | Flag a mistake

4 **Silver coins conduct electricity well. Why?**

A they are cold

B they have free electrons

C they are heavy

D they are shiny and reflective

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5 **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 amperes
- D volts, the unit of voltage

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

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

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7 **What is the mass of 3 moles of a substance with a relative formula mass of 58.5?**

- A 87.75 g
- B 351 g
- C 175.5 g
- D 185.5 g

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8 **What is the relative formula mass of water, H_2O?**

- A 16
- B 18
- C 10
- D 20

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9 **A solution has 10 g of salt in 2 cubic decimetres of water. What is its concentration?**

- A 12 g/dm³
- B 5 g/dm³
- C 2 g/dm³
- D 20 g/dm³

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10 **A reaction should make 50 g of product but makes 40 g. What is the percentage yield?**

- A 90%
- B 10%
- C 125%
- D 80%

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11 **How many moles are there in 12 g of a substance with a relative formula mass of 40?**

- A 0.3
- B 0.9
- C 0.6
- D 0.15

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12 **What is the relative formula mass of magnesium oxide, MgO?**

- A 36
- B 48
- C 40
- D 80

Understand It with Pulse | Flag a mistake

13 **What is the mass of 4 moles of a substance with a relative formula mass of 16?**

A 128 g

B 74 g

C 64 g

D 32 g

Understand It with Pulse | Flag a mistake

14 **What is the relative formula mass of methane, CH_4?**

A 14

B 16

C 12

D 20

Understand It with Pulse | Flag a mistake

15 How many moles are there in 8 g of a substance with a relative formula mass of 20?

- A 0.2
- B 0.8
- C 0.4
- D 1.2

Understand It with Pulse | Flag a mistake

16 What is the relative formula mass of ammonia, NH_3?

- A 13
- B 25
- C 17
- D 34

Understand It with Pulse | Flag a mistake

17 **What is the mass of 5 moles of a substance with a relative formula mass of 20?**

A 50 g

B 110 g

C 100 g

D 200 g

Understand It with Pulse | Flag a mistake

18 **What is the relative formula mass of calcium carbonate, $CaCO_3$?**

A 60

B 100

C 112

D 84

Understand It with Pulse | Flag a mistake

19 **A reaction should make 20 g of product but makes 16 g. What is the percentage yield?**

- A 80%
- B 125%
- C 4%
- D 36%

Understand It with Pulse | Flag a mistake

20 **How many moles are there in 24 g of a substance with a relative formula mass of 40?**

- A 0.3
- B 1.2
- C 0.6
- D 1.8

Understand It with Pulse | Flag a mistake

21 **What is the relative formula mass of sodium chloride, NaCl?**

- A 23
- B 58.5
- C 81.5
- D 35.5

Understand It with Pulse | Flag a mistake

22 **What is the mass of 5 moles of a substance with a relative formula mass of 58.5?**

- A 585 g
- B 302.5 g
- C 292.5 g
- D 146.25 g

Understand It with Pulse | Flag a mistake

23 How many moles are there in 8 g of a substance with a relative formula mass of 40?

- A 0.2
- B 0.1
- C 0.6
- D 0.4

Understand It with Pulse | Flag a mistake

24 What is the relative formula mass of potassium chloride, KCl?

- A 82.5
- B 74.5
- C 149
- D 70.5

Understand It with Pulse | Flag a mistake

25 **What is the mass of 3 moles of a substance with a relative formula mass of 20?**

A 30 g

B 60 g

C 70 g

D 120 g

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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