ENGLAND GCSE COMBINED SCIENCE AQA TRILOGY FOUNDATION · 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 **Silver coins are made of the element silver. What is the chemical symbol for silver?**

A Sv

B Si

C Ag

D S

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2 **A chocolate cake is made from flour, sugar and eggs. Which ingredient provides protein?**

A sugar

B water

C eggs

D flour

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

A a salt is present

B an alkali is present

C a metal is present

D an acid is present

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

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

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5 **A calculator is switched on. What does the battery transfer energy to?**

- A the case
- B the circuits
- C the screen only
- D the buttons only

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6 **A thermometer shows a patient's temperature is 39 degrees Celsius. Is this above or below normal body temperature?**

- A below normal
- B above normal
- C impossible to tell
- D exactly normal

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

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

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8 **How many moles are there in 40 g of a substance with a relative formula mass of 16?**

A 5

B 1.25

C 2.5

D 7.5

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9 **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%

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10 **In a reaction, 10 g of A reacts with 6 g of B. What mass of product is made?**

A 6 g

B 16 g

C 10 g

D 4 g

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

A 36

B 48

C 40

D 80

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12 **What is the mass of 5 moles of a substance with a relative formula mass of 16?**

- A 160 g
- B 80 g
- C 40 g
- D 90 g

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13 **What is the relative formula mass of carbon dioxide, CO_2?**

- A 40
- B 32
- C 28
- D 44

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

A 2.4

B 3.6

C 1.2

D 0.6

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15 **What is the mass of 5 moles of a substance with a relative formula mass of 40?**

A 210 g

B 200 g

C 100 g

D 400 g

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16 **What is the relative formula mass of sulfuric acid, H_2SO_4?**

A 82

B 98

C 114

D 66

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

A 1.8

B 1.2

C 0.3

D 0.6

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18 **What is the relative formula mass of hydrogen chloride, HCl?**

- A 44.5
- B 36.5
- C 32.5
- D 73

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

- A 200 g
- B 100 g
- C 50 g
- D 110 g

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

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

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

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

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

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

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23 **What is the relative formula mass of calcium oxide, CaO?**

- **A** 112
- **B** 64
- **C** 56
- **D** 52

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

A 120 g

B 70 g

C 60 g

D 30 g

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25 **How many moles are there in 12 g of a substance with a relative formula mass of 20?**

A 0.3

B 0.6

C 1.2

D 1.8

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ANSWER KEY

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

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