ENGLAND GCSE COMBINED SCIENCE AQA TRILOGY FOUNDATION · UNIT 15 · 25 QUESTIONS

Chemical Analysis — 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 cup of coffee is left for an hour. What happens to its temperature?**

- A it stays the same all day
- B it rises above room temperature
- C it falls to room temperature
- D it falls to zero degrees

Understand It with Pulse | Flag a mistake

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

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

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3 **Lemons contain citric acid. What is the pH of lemon juice likely to be?**

- A 12
- B 7
- C 2
- D 14

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4 **Silver coins are made of the element silver. What is the chemical symbol for silver?**

- A Si
- B S
- C Ag
- D Sv

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5 **Paintbrushes are cleaned in water. Why does the paint wash off?**

A the paint melts in the water

B the paint freezes in the water

C the paint burns in the water

D the paint dissolves

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6 **An ice cream cone is put in a freezer. What happens to the liquid?**

A it freezes

B it condenses

C it boils

D it evaporates

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7 **How many atoms of hydrogen are there in one molecule of methane?**

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

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8 **A sample containing lithium is put in a flame. What colour is the flame?**

- A crimson
- B pale lilac
- C bright yellow
- D orange-red flame

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9 **In a chromatogram, a spot moves 2 cm and the solvent moves 8 cm. What is the Rf value?**

- A 0.25
- B 0.4
- C 0.5
- D 0.35

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10 **How do you test for carbon dioxide gas?**

- A it turns limewater cloudy
- B it burns with a pop
- C it turns litmus blue
- D it relights a glowing splint

Understand It with Pulse | Flag a mistake

11 **What is the test for oxygen?**

- **A** a lighted splint pops
- **B** bromine water turns colourless
- **C** a glowing splint relights
- **D** limewater turns cloudy

Understand It with Pulse | Flag a mistake

12 **How many atoms of oxygen are there in one molecule of water?**

- **A** 1
- **B** 2
- **C** 0
- **D** 3

Understand It with Pulse | Flag a mistake

13 **Which of these is a formulation?**

A water

B oxygen

C salt

D paint

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14 **A sample containing copper is put in a flame. What colour is the flame?**

A pale lilac

B bright yellow

C green

D crimson red

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15 **In a chromatogram, a spot moves 3 cm and the solvent moves 8 cm. What is the Rf value?**

- A 0.47
- B 0.53
- C 0.38
- D 0.75

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16 **Which gas is given off when an acid reacts with a carbonate?**

- A hydrogen gas from the acid
- B oxygen gas from the air
- C chlorine gas from the salt
- D carbon dioxide

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17 **How many atoms of sodium are there in one molecule of sodium chloride?**

A 1

B 0

C 3

D 2

Understand It with Pulse | Flag a mistake

18 **In a chromatogram, a spot moves 2 cm and the solvent moves 12 cm. What is the Rf value?**

A 0.33

B 0.32

C 0.27

D 0.17

Understand It with Pulse | Flag a mistake

19 **What is the test for hydrogen?**

A bromine water turns colourless

B a lighted splint pops

C limewater turns cloudy

D a glowing splint relights

Understand It with Pulse | Flag a mistake

20 **How many atoms of hydrogen are there in one molecule of ammonia?**

A 5

B 4

C 3

D 2

Understand It with Pulse | Flag a mistake

21 **A sample containing sodium is put in a flame. What colour is the flame?**

- A orange-red flame
- B yellow
- C pale lilac
- D crimson red

Understand It with Pulse | Flag a mistake

22 **In a chromatogram, a spot moves 4 cm and the solvent moves 12 cm. What is the Rf value?**

- A 0.33
- B 0.67
- C 0.48
- D 0.43

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23 **What is the test for chlorine?**

- A limewater turns cloudy in the gas
- B a lighted splint pops with a squeak
- C damp litmus paper is bleached
- D a glowing splint relights brightly

Understand It with Pulse | Flag a mistake

24 **In a chromatogram, a spot moves 5 cm and the solvent moves 12 cm. What is the Rf value?**

- A 0.52
- B 0.42
- C 0.57
- D 0.83

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25

How do you test for hydrogen gas?

A it turns limewater cloudy

B it burns with a squeaky pop

C it relights a glowing splint

D it turns damp litmus red

Understand It with Pulse

Flag a mistake

ANSWER KEY

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

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