ENGLAND GCSE CHEMISTRY OCR TWENTY FIRST CENTURY HIGHER · UNIT 5 · 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 **Lemons contain citric acid. What do acids make with metals?**

- A a salt and oxygen gas
- B a salt and water, never hydrogen
- C a salt and hydrogen
- D water only, nothing else

Understand It with Pulse | Flag a mistake

2 **A river flows to the sea. What is this part of?**

- A the rock cycle
- B the nitrogen cycle
- C the carbon cycle
- D the water cycle

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3 **A castle built of limestone is damaged by acid rain. Which gas causes acid rain?**

- A carbon dioxide
- B oxygen
- C sulfur dioxide
- D nitrogen

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

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

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5 **A chocolate cake rises in the oven. What makes it rise?**

- A a gas is made
- B the flour melts
- C the sugar freezes
- D the egg evaporates

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6 **Paintbrushes are used with paint. What is paint an example of?**

- A a formulation
- B a pure substance
- C an element
- D a compound

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

A a lighted splint pops

B a glowing splint relights

C limewater turns cloudy

D bromine water turns colourless

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8 **Why is an indicator used in a titration?**

A to show the end

B to cool the mixture

C to colour the acid

D to heat the mixture

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

A it turns litmus blue

B it relights a glowing splint

C it turns limewater cloudy

D it burns with a pop

Understand It with Pulse | Flag a mistake

10 **What is used to test for chloride ions?**

A limewater

B barium chloride

C silver nitrate

D dilute acid

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11 **Why are instrumental methods used to test athletes?**

A they give results in seconds

B they are cheap to run anywhere in the world

C they can find tiny amounts of drugs

D they work without a sample

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12 **A sample containing potassium is put in a flame. What colour is the flame?**

A crimson red

B orange-red flame

C lilac

D bright yellow

Understand It with Pulse | Flag a mistake

13 **What is seen when sodium hydroxide is added to aluminium chloride solution?**

A a brown precipitate forms at once

B a white precipitate

C a blue precipitate forms at once

D a green precipitate forms at once

Understand It with Pulse | Flag a mistake

14 **What is flame emission spectroscopy?**

A analysing the light from a flame

B measuring the temperature of a flame

C counting the colours in a flame

D weighing the sample in a flame

Understand It with Pulse | Flag a mistake

15 **Why does chromatography work?**

A dyes are all coloured

B dyes move differently

C dyes do not dissolve

D dyes are all the same

Understand It with Pulse | Flag a mistake

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

A limewater turns cloudy in the gas

B damp litmus paper is bleached

C a lighted splint pops with a squeak

D a glowing splint relights brightly

Understand It with Pulse | Flag a mistake

17 **What piece of equipment measures the volume in a titration?**

- A a beaker
- B a test tube
- C a burette
- D a flask

Understand It with Pulse | Flag a mistake

18 **How can you test for hydrogen gas?**

- A a lighted splint pops
- B limewater turns cloudy
- C a glowing splint relights
- D a damp litmus paper

Understand It with Pulse | Flag a mistake

19 **What can gas chromatography separate?**

- A acids from alkalis only
- B mixtures of gases
- C solids from liquids only
- D metals from their ores

Understand It with Pulse | Flag a mistake

20 **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

21 **How do you test for sulfate ions?**

A silver nitrate gives a yellow precipitate

B barium chloride gives a white precipitate

C a glowing splint relights brightly

D limewater turns cloudy white

Understand It with Pulse | Flag a mistake

22 **Why is flame emission spectroscopy useful?**

A it can identify very small amounts

B it needs no sample at all

C it works without any equipment at all

D it works on solids only

Understand It with Pulse | Flag a mistake

23 **What is the filtrate in filtration?**

- A the filter paper
- B the liquid collected
- C the funnel
- D the solid left behind

Understand It with Pulse | Flag a mistake

24 **What does a concentration tell you?**

- A how much is dissolved
- B how hot it is
- C how heavy it is
- D how fast it reacts with acid

Understand It with Pulse | Flag a mistake

25

How can you test for carbon dioxide?

A a damp litmus paper

B a glowing splint relights

C a lighted splint pops

D limewater turns cloudy

Understand It with Pulse

Flag a mistake

ANSWER KEY

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

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