ENGLAND GCSE COMBINED SCIENCE OCR TWENTY FIRST CENTURY FOUNDATION · UNIT 11 · 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 river provides drinking water. Why must the water be treated before drinking?**

- A to make it taste better for drinking
- B to heat it up for use
- C to remove harmful substances
- D to add minerals for health

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

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

A the paint dissolves

B the paint freezes in the water

C the paint melts in the water

D the paint burns in the water

Understand It with Pulse | Flag a mistake

4 **A castle wall is made of stone. What type of rock is limestone?**

A metamorphic

B sedimentary

C igneous

D volcanic

Understand It with Pulse | Flag a mistake

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

A they conduct electricity

B they are brittle

C they do not conduct electricity at all

D they dissolve in water

Understand It with Pulse | Flag a mistake

6 **Lemons contain citric acid. What do acids make with metals?**

A water only, nothing else

B a salt and hydrogen

C a salt and oxygen gas

D a salt and water, never hydrogen

Understand It with Pulse | Flag a mistake

7 **What does a white precipitate show when silver nitrate is added?**

- A an alkali is present
- B a chloride is present
- C a sulfate is present
- D a carbonate is present

Understand It with Pulse | Flag a mistake

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

- A limewater turns cloudy white
- B silver nitrate gives a yellow precipitate
- C a glowing splint relights brightly
- D barium chloride gives a white precipitate

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

10 **Why are instrumental methods better than chemical tests?**

- A they are fast, sensitive and accurate
- B they work on solids only
- C they are cheap and need no training at all
- D they need no sample at all

Understand It with Pulse | Flag a mistake

11 **What is the test for carbon dioxide?**

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

Understand It with Pulse | Flag a mistake

12 **What is the residue in filtration?**

- **A** the solid left behind
- **B** the filter paper
- **C** the funnel
- **D** the liquid that passes through

Understand It with Pulse | Flag a mistake

13 **What colour flame does sodium give in a flame test?**

A yellow

B lilac

C brick red

D green

Understand It with Pulse | Flag a mistake

14 **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

15 **What colour flame does sodium give?**

A blue

B bright green

C red

D yellow

Understand It with Pulse | Flag a mistake

16 **What is seen when sodium hydroxide is added to iron(III) chloride solution?**

A a blue precipitate forms at once

B a green precipitate forms at once

C a brown precipitate

D a white precipitate forms at once

Understand It with Pulse | Flag a mistake

17 **A sample containing calcium is put in a flame. What colour is the flame?**

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

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

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

- A they work without a sample
- B they give results in seconds
- C they are cheap to run anywhere in the world
- D they can find tiny amounts of drugs

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

21 **What is the end point of a titration?**

A the flask breaks

B the acid boils

C the solution freezes

D the colour changes

Understand It with Pulse | Flag a mistake

22 **What colour flame does potassium give?**

A green

B yellow

C lilac

D red

Understand It with Pulse | Flag a mistake

23 **How can sand be separated from water?**

A evaporation

B chromatography

C filtration

D distillation

Understand It with Pulse | Flag a mistake

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

A it turns limewater cloudy

B it relights a glowing splint

C it burns with a pop

D it turns litmus blue

Understand It with Pulse | Flag a mistake

25 **What happens to the white precipitate of aluminium hydroxide in excess sodium hydroxide?**

A it turns brown at once

B it dissolves

C it turns blue at once

D it forms more precipitate

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.