ENGLAND GCSE CHEMISTRY EDEXCEL FOUNDATION · UNIT 2 · 25 QUESTIONS

States of Matter and Mixtures — 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 falls to zero degrees

B it rises above room temperature

C it stays the same all day

D it falls to room temperature

Understand It with Pulse | Flag a mistake

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

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

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3 **A hot air balloon cools down. What happens?**

- A it rises faster
- B it stays still
- C it bursts
- D it sinks

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4 **A swimming pool holds water. Why does a person float in the pool?**

A their density is close to water

B the water pushes them down

C they are made of air

D they are heavier than water and sink

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5 **Glass marbles are shaken in a tray. What does this model?**

A particles gaining energy

B particles bonding together

C particles disappearing completely

D particles freezing into place

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6 **Paintbrushes apply paint to a wall. What is the paint made of?**

A pure water with nothing in it

B a single element, nothing else

C a mixture of substances

D a single compound, nothing else

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7 **Why do different dyes have different Rf values?**

A they are all the same colour

B they dissolve differently in the solvent

C they have the same solubility in the solvent

D they move at the same speed

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

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

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9 **In a chromatogram, a spot moves 6 cm and the solvent moves 12 cm. What is the Rf value?**

- A 0.6
- B 1
- C 0.65
- D 0.5

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10 **What happens to internal energy when a substance is heated?**

- A it increases
- B it decreases
- C it becomes zero
- D it stays the same

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11 **An ice cream cone melts. What is the melting point of the ice cream?**

- A around 37 degrees Celsius
- B around minus 20 degrees Celsius
- C around 100 degrees Celsius
- D around 0 degrees Celsius

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12 **What colour flame does potassium give in a flame test?**

- A yellow
- B brick red
- C green
- D lilac

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

14 **Which change of state is endothermic?**

A melting

B solidifying

C freezing

D condensing

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

A orange-red flame

B crimson red

C pale lilac

D yellow

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

A 0

B 3

C 2

D 1

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17 **In a chromatogram, a spot moves 6 cm and the solvent moves 10 cm. What is the Rf value?**

A 0.75

B 0.6

C 0.7

D 1.2

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

A it turns limewater cloudy

B it turns litmus blue

C it burns with a pop

D it relights a glowing splint

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

A a lighted splint pops

B limewater turns cloudy

C bromine water turns colourless

D a glowing splint relights

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

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

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21 **What does it mean if a chromatogram shows several spots?**

- A the sample is a pure substance
- B the paper is too short
- C the sample is a mixture
- D the solvent is impure

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

A 0.35

B 0.5

C 0.4

D 0.25

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23 **In which state do particles vibrate in fixed positions?**

A solid

B plasma

C liquid

D gas

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

A it turns limewater cloudy

B it burns with a squeaky pop

C it turns damp litmus red

D it relights a glowing splint

Understand It with Pulse | Flag a mistake

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

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

ANSWER KEY

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

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