ENGLAND GCSE COMBINED SCIENCE EDEXCEL FOUNDATION · UNIT 12 · 25 QUESTIONS

Chemical Changes — 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 taste sour. What does sour taste show?**

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

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

- A it boils
- B it evaporates
- C it condenses
- D it freezes

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

A a formulation

B a compound

C a pure substance

D an element

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4 **A cup of coffee is left for an hour. What happens to its temperature?**

A it falls to room temperature

B it rises above room temperature

C it falls to zero degrees

D it stays the same all day

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

A sugar

B eggs

C water

D flour

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

A oxygen

B carbon dioxide

C sulfur dioxide

D nitrogen

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7 **When copper sulfate solution is electrolysed with carbon electrodes, what is made at the cathode?**

A sulfur from the sulfate ions

B copper

C oxygen gas from the water

D hydrogen gas from the water

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

A 2

B 0.5

C 1

D 3

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9 **Will magnesium displace iron from its salt solution?**

A yes

B no

C only when heated

D only with a catalyst

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10 **Why is cryolite added to aluminium oxide in its electrolysis?**

A it makes the reaction go faster

B it stops the carbon anodes burning

C it lowers the melting point

D it makes the aluminium purer

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11 **How are insoluble salts made?**

A by precipitation

B by distillation

C by filtration

D by evaporation of the solvent

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12 **What forms at the anode during the electrolysis of sodium chloride solution?**

A chlorine

B bromine

C hydrogen

D lead

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13 **Which acid is a weak acid?**

A sulfuric acid

B ethanoic acid

C hydrochloric acid

D nitric acid

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14 **Which acid makes a sulfate salt?**

A ethanoic acid

B hydrochloric acid

C sulfuric acid

D nitric acid

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15 **A solution has a hydrogen ion concentration of 10^{-1}mol per cubic decimetre. What is its pH?**

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

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16 **What gas is made at the anode when brine is electrolysed?**

- A chlorine
- B oxygen
- C nitrogen
- D hydrogen

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17 **What is made at the anode when concentrated hydrochloric acid is electrolysed?**

A hydrogen gas from the acid

B chlorine

C sodium metal from the solution

D oxygen gas from the water

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18 **What is the pH of a neutral solution?**

A 0

B 7

C 14

D 1

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19 **How many moles are there in 40 g of a substance with a relative formula mass of 20 ?**

A 4

B 2

C 1

D 6

Understand It with Pulse | Flag a mistake

20 **Will copper displace zinc from its salt solution?**

A no

B only with a catalyst

C only when heated

D yes

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21 **Why is the filtrate evaporated when making a salt?**

- A to dissolve the salt again
- B to get crystals of the salt
- C to make the salt melt
- D to remove the acid from it completely

Understand It with Pulse | Flag a mistake

22 **What forms at the anode during the electrolysis of copper sulfate solution?**

- A lead
- B bromine
- C hydrogen
- D oxygen

Understand It with Pulse | Flag a mistake

23 **Why does a solution of hydrogen chloride in water conduct electricity?**

- A it is a metal in solution
- B water conducts electricity alone
- C it contains free electrons
- D it contains ions

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24 **Which salt is made from hydrochloric acid and sodium hydroxide?**

- A sodium chloride
- B sodium nitrate
- C sodium sulfate
- D sodium carbonate

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25 **A solution has a hydrogen ion concentration of 10^{-3}mol per cubic decimetre. What is its pH?**

A 3

B 2

C 5

D 4

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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