ENGLAND GCSE CHEMISTRY OCR GATEWAY HIGHER · UNIT 6 · 25 QUESTIONS

Global Challenges — 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 chocolate cake is made from flour, sugar and eggs. Which ingredient provides protein?**

- A water
- B eggs
- C sugar
- D flour

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2 **A cup of coffee is hot. How is energy transferred to the air?**

- A by condensation on the cold cup
- B by conduction and convection
- C by evaporation only, from the top
- D by radiation only, from the surface

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3 **Fishing boats float on water. Why do they float?**

- A they displace enough water
- B they have sails that catch the wind
- C they are heavy and sink slowly
- D they are made of metal, which floats

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4 **A forest is cut down. What happens to the carbon stored in the trees?**

- A it turns to oxygen
- B it is stored forever
- C it disappears
- D it is released

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5 **A thermometer is placed in hot water. What happens to the liquid inside the thermometer?**

- A it freezes
- B it expands
- C it evaporates
- D it contracts

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6 **A sailing ship crosses the sea. What is the sea mostly made of?**

- A salt water
- B sand
- C oil
- D fresh water

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7 **A river provides drinking water. Why must the water be treated before drinking?**

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

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8 **What is a problem with disposing of polymers in landfill?**

- A most do not biodegrade
- B they dissolve in the rain
- C they burn very easily
- D they are too heavy to bury

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9 **An alloy is 50 percent copper. How much copper is in 400 kg of the alloy?**

A 400 kg

B 200 kg

C 225 kg

D 175 kg

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10 **What is the main gas in the air today?**

A oxygen

B argon

C nitrogen

D carbon dioxide

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11 **What is a finite resource?**

A a resource that is recycled

B a resource that will run out

C a resource from the sea

D a resource that never runs out

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12 **In fractional distillation, where do the smallest molecules come out?**

A at the top

B in the middle

C at the bottom

D they do not come out

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13 **Which of these is a condensation polymer?**

A poly(propene), an addition polymer

B poly(chloroethene), an addition polymer

C poly(ethene), an addition polymer

D polyester

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14 **Carbon dioxide levels rose from 300 ppm to 400 ppm. What is the increase?**

A 140 ppm

B 120 ppm

C 80 ppm

D 100 ppm

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15 **Why is water vapour a greenhouse gas?**

A it reflects sunlight away from the Earth

B it cools the Earth down

C it blocks ultraviolet light

D it absorbs infrared radiation

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16 **What do catalytic converters change nitrogen oxides into?**

A sulfur dioxide

B carbon dioxide and water

C ammonia and water

D nitrogen and oxygen

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17 **What is one effect of climate change on weather?**

A colder summers everywhere

B less rain everywhere

C more extreme weather

D weather stays the same

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18 **Glass is recycled at 50 percent. How much of 200 tonnes of glass is recycled?**

A 100 tonnes

B 75 tonnes

C 200 tonnes

D 125 tonnes

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19 **What is the formula of ethanoic acid?**

- A CH_4
- B CH_3COOH
- C C_2H_5OH
- D C_3H_7COOH

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20 **What conditions are used to make ethanol from ethene?**

- A hydrogen and a cold catalyst
- B oxygen and a very high pressure
- C steam and a catalyst
- D cold water and no catalyst

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21 **Why might two life cycle assessments of the same product disagree?**

A one of them is always wrong

B they use different data and choices

C they measure different products

D they take different amounts of time to finish

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22 **Nitrogen is 78 percent of the air. How much nitrogen is there in 1000 litres of air?**

A 770 L

B 790 L

C 1560 L

D 780 L

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23 **A town uses 2000 litres of water per day. How much water does it use in one week?**

- A 15000 L
- B 14000 L
- C 13000 L
- D 28000 L

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24 **What is ethanol used for?**

- A as a food preservative only
- B as a fuel and a solvent
- C as a fertiliser for crops
- D as a bleach for cleaning

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25

An alkane has 7 carbon atoms. How many hydrogen atoms does one molecule have?

A 16

B 12

C 18

D 14

Understand It with Pulse

Flag a mistake

ANSWER KEY

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

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