ENGLAND GCSE COMBINED SCIENCE AQA TRILOGY HIGHER · UNIT 14 · 25 QUESTIONS

Organic Chemistry — 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 sailing ship uses the wind. What type of energy is wind?**

- A thermal energy
- B kinetic energy
- C potential energy
- D chemical energy

Understand It with Pulse | Flag a mistake

2 **A cup of coffee cools down. Energy is transferred to the surroundings. What type of change is this?**

- A a reversible reaction
- B an energy transfer
- C a neutralisation
- D a chemical change

Understand It with Pulse | Flag a mistake

3 **A cheese pizza contains cheese made from milk. What is milk rich in?**

A vitamin C

B fibre

C iron

D calcium

Understand It with Pulse | Flag a mistake

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

A the rock cycle

B the carbon cycle

C the nitrogen cycle

D the water cycle

Understand It with Pulse | Flag a mistake

5 **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

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

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

Understand It with Pulse | Flag a mistake

7 **What is an alkene?**

A a hydrocarbon with a double bond

B a hydrocarbon with no bonds

C a saturated hydrocarbon

D a hydrocarbon with a triple bond

Understand It with Pulse | Flag a mistake

8 **An alkane has 5 carbon atoms. How many hydrogen atoms does one molecule have?**

A 10

B 8

C 12

D 14

Understand It with Pulse | Flag a mistake

9 **What do alkanes make when they burn completely?**

- A carbon and hydrogen
- B carbon dioxide and water
- C carbon monoxide and water
- D oxygen and water

Understand It with Pulse | Flag a mistake

10 **What is the relative formula mass of the alkane C_4H_{10}?**

- A 58
- B 60
- C 56
- D 70

Understand It with Pulse | Flag a mistake

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

A in the middle

B at the bottom

C they do not come out

D at the top

Understand It with Pulse | Flag a mistake

12 **What are alkenes used to make?**

A fuels for cars and lorries

B acids for cleaning

C salts for cooking

D polymers

Understand It with Pulse | Flag a mistake

13 **An alkane with 12 carbon atoms is cracked. One product is an alkene with 4 carbon atoms. How many carbon atoms does the other product have?**

- A 10
- B 8
- C 9
- D 7

Understand It with Pulse | Flag a mistake

14 **An alkane has 6 carbon atoms. How many hydrogen atoms does one molecule have?**

- A 14
- B 12
- C 16
- D 10

Understand It with Pulse | Flag a mistake

15 **What is the general formula of the alkanes?**

- **A** CnH_2n-_2
- **B** CnH_2n+_1
- **C** CnH_2n+_2
- **D** CnH_2n

Understand It with Pulse | Flag a mistake

16 **What is the relative formula mass of the alkane C_2H_6?**

- **A** 42
- **B** 30
- **C** 28
- **D** 32

Understand It with Pulse | Flag a mistake

17 **What is poly(ethene) made from?**

A ethanol

B ethene

C ethanoic acid

D ethane

Understand It with Pulse | Flag a mistake

18 **What is the test for an alkene?**

A universal indicator turns red in acid

B bromine water turns colourless

C limewater turns cloudy with gas

D a lighted splint pops loudly

Understand It with Pulse | Flag a mistake

19 **An alkane with 8 carbon atoms is cracked. One product is an alkene with 2 carbon atoms. How many carbon atoms does the other product have?**

- **A** 8
- **B** 7
- **C** 6
- **D** 5

Understand It with Pulse | Flag a mistake

20 **What is the general formula of the alkenes?**

- **A** CnH_2n
- **B** CnH_2n+_2
- **C** CnH_2n-_2
- **D** CnHn

Understand It with Pulse | Flag a mistake

21 **What is the formula of ethane?**

- A C_2H_6
- B C_3H_8
- C CH_4
- D C_2H_4

Understand It with Pulse | Flag a mistake

22 **What is the relative formula mass of the alkane C_3H_8?**

- A 56
- B 44
- C 42
- D 46

Understand It with Pulse | Flag a mistake

23 **What is cracking?**

- **A** burning alkanes in air to release energy
- **B** breaking long alkanes into shorter ones
- **C** dissolving alkanes in water to clean them
- **D** joining short alkanes together to make longer ones

Understand It with Pulse | Flag a mistake

24 **An alkane with 14 carbon atoms is cracked. One product is an alkene with 2 carbon atoms. How many carbon atoms does the other product have?**

- **A** 11
- **B** 12
- **C** 14
- **D** 13

Understand It with Pulse | Flag a mistake

25 **What is the monomer of poly(propene)?**

A ethene

B propene

C butene

D propane

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.