ENGLAND GCSE CHEMISTRY EDEXCEL HIGHER · UNIT 9 · 25 QUESTIONS

# Separate Chemistry 2 — 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** **An ice cream cone melts. What is the melting point of the ice cream?**

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

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

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

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

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

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

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

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

A an element

B a pure substance

C a formulation

D a compound

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

A their density is close to water

B they are heavier than water and sink

C they are made of air

D the water pushes them down

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7 **What is a property of ceramics?**

A they have high melting points

B they bend easily

C they melt at low temperatures

D they conduct electricity well

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8 **What is the functional group in an ester?**

A the ester group

B the hydroxyl group

C the carboxyl group

D the amino group

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**9** **What is flame emission spectroscopy?**

- **A** weighing the sample in a flame
- **B** measuring the temperature of a flame
- **C** analysing the light from a flame
- **D** counting the colours in a flame

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

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

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

A particles gaining energy

B particles disappearing completely

C particles freezing into place

D particles bonding together

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

A a salt and hydrogen

B water only, nothing else

C a salt and oxygen gas

D a salt and water, never hydrogen

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

- A polyester
- B poly(chloroethene), an addition polymer
- C poly(propene), an addition polymer
- D poly(ethene), an addition polymer

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

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

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

A it disappears

B it turns to oxygen

C it is released

D it is stored forever

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16 **What is seen when dilute acid is added to a carbonate?**

A a blue precipitate forms

B the solution turns yellow

C bubbles of carbon dioxide

D a white precipitate forms

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17 **Why are nanoparticles used in sun cream?**

A they block ultraviolet light

B they cool the skin down quickly

C they make the cream waterproof

D they make the cream smell pleasant

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

A crimson

B yellow

C green

D lilac

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19 **What does ethanol burn to make?**

A carbon dioxide and water

B oxygen and water only

C carbon monoxide and hydrogen

D carbon and hydrogen

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20 **What does mass spectrometry measure?**

A the volume of a gas

B the colours of a flame

C the temperature of a sample

D the masses of particles

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21 **How is pure ethanol obtained from the fermented mixture?**

A by crystallisation

B by chromatography

C by filtration

D by distillation

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22 **Why does a nanoparticle catalyst work faster than a lump of the same metal?**

A it melts at a lower temperature

B it is much heavier than the lump

C more atoms are on the surface

D it dissolves in the reaction mixture

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

A it stays still

B it sinks

C it bursts

D it rises faster

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24 **Why is carbon fibre used in aircraft parts?**

A it is strong for its mass

B it is the cheapest material

C it is easy to recycle

D it melts at a low temperature

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25 **What are esters used for?**

A as fuels burned in car engines

B in perfumes and flavourings

C as fertilisers spread on fields

D as bleaches used for cleaning

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# ANSWER KEY

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

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