ENGLAND GCSE CHEMISTRY OCR GATEWAY FOUNDATION · UNIT 5 · 10 QUESTIONS

Monitoring and Controlling Chemical Reactions — 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 hot. How is energy transferred to the air?**

A by radiation only, from the surface

B by condensation on the cold cup

C by conduction and convection

D by evaporation only, from the top

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2 **A chocolate cake rises in the oven. What makes it rise?**

A the sugar freezes

B the egg evaporates

C the flour melts

D a gas is made

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3 **A solution has a concentration of 2 mol per cubic decimetre. How many moles are in 2 cubic decimetres of the solution?**

A 3 mol

B 5 mol

C 4 mol

D 8 mol

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4 **In the disappearing cross experiment, what is timed?**

- A how long the cross takes to vanish
- B how long the acid takes to boil
- C how long the mixture takes to cool down
- D how long the cross takes to appear

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5 **What happens to the temperature during an exothermic reaction?**

- A it stays the same
- B it falls
- C it falls then rises
- D it rises

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6 **A reaction makes 3 moles of gas. What volume does the gas occupy at room temperature and pressure?**

- A 144 dm^3
- B 72 dm^3
- C 60 dm^3
- D 84 dm^3

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7 **On a reaction profile, what is the difference between the reactants and the products?**

- A the rate of the reaction over time
- B the overall energy change
- C the temperature change
- D the activation energy

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8 **In a second experiment, 50 cm cubed of gas are made in 30 seconds. What is the rate of the reaction?**

- A 1.6667 cm^3/s
- B 3.1667 cm^3/s
- C 2.1667 cm^3/s
- D 1.1667 cm^3/s

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9 **A reaction should make 100 g of product but only makes 50 g. What is the percentage yield?**

- A 40%
- B 60%
- C 50%
- D 100%

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10 **A reaction produces 20 cm cubed of gas in 20 seconds. What is the mean rate of reaction?**

- A 0.5 cm^3/s
- B 2 cm^3/s
- C 1 cm^3/s
- D 1.5 cm^3/s

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ANSWER KEY

1. C
2. D
3. C
4. A
5. D
6. B
7. B
8. A
9. C
10. C

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