ENGLAND GCSE CHEMISTRY OCR GATEWAY HIGHER · UNIT 3 · 10 QUESTIONS

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 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

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

- A carbon dioxide
- B oxygen
- C nitrogen
- D sulfur dioxide

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3 **What is the relative formula mass of magnesium oxide, MgO?**

- A 48
- B 36
- C 80
- D 40

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4 **What is an ionic equation?**

- A an equation showing every ion in the mixture
- B an equation for ionic bonding only
- C an equation showing only the reacting ions
- D an equation with no charges shown at all

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5 **What is made at the negative electrode in aluminium extraction?**

- A oxygen gas from the air
- B cryolite from the mixture
- C carbon dioxide gas
- D aluminium

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6 **What volume does 1 moles of carbon dioxide occupy at room temperature and pressure?**

- A 48 dm^3
- B 36 dm^3
- C 12 dm^3
- D 24 dm^3

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7 **Which acid is a weak acid?**

A nitric acid

B sulfuric acid

C ethanoic acid

D hydrochloric acid

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8 **What is one advantage of a hydrogen fuel cell over a petrol engine?**

A it never needs refuelling

B it makes no carbon dioxide

C it uses petrol more efficiently

D it is cheaper to build

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9 **What is a rechargeable cell?**

A a cell that can be charged again

B a cell that makes electricity from light

C a cell that can never be used again

D a cell that runs out very quickly

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10 **What is the mass of 4 moles of a substance with a relative formula mass of 20?**

A 160 g

B 40 g

C 90 g

D 80 g

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ANSWER KEY

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

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