ENGLAND GCSE CHEMISTRY OCR GATEWAY HIGHER · UNIT 2 · 10 QUESTIONS

Elements, Compounds and Mixtures — 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 hot air balloon rises because the air inside it is less dense than the air outside. What happens to the density of air when it is heated?**

- A it increases
- B it decreases
- C it becomes zero
- D it stays the same

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2 **Glass marbles are used to model atoms. What is a limitation of the model?**

A marbles are too small to see properly

B marbles are the wrong colour for atoms

C marbles cannot be counted accurately at all

D marbles are much bigger than atoms

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3 **Lemons taste sour. What does sour taste show?**

A an acid is present

B an alkali is present

C a salt is present

D a metal is present

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4 **Why are nanoparticles useful as catalysts?**

- **A** they are magnetic and easy to collect
- **B** their surface area is large
- **C** they dissolve easily in water
- **D** they are heavy and sink to the bottom

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5 **What is the formula of sodium chloride?**

- **A** Na_2Cl
- **B** $NaCl$
- **C** $NaCl_2$
- **D** Na_2Cl_2

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6 **What does adding carbon to iron do?**

A it makes it softer and weaker

B it makes it harder

C it makes it melt more easily

D it makes it conduct less heat

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7 **What holds the molecules together in a simple molecular substance?**

A weak intermolecular forces

B strong ionic bonds between molecules

C strong covalent bonds between molecules

D a sea of delocalised electrons

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8 **How many atoms of oxygen are there in one molecule of carbon dioxide?**

A 4

B 2

C 3

D 1

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9 **What is seen when sodium hydroxide is added to iron(II) sulfate solution?**

A a white precipitate forms at once

B a blue precipitate forms at once

C a green precipitate

D a brown precipitate forms at once

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10 **What is the formula of carbon dioxide?**

A CO_3

B C_2O

C CO_2

D CO

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ANSWER KEY

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

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