ENGLAND GCSE COMBINED SCIENCE OCR GATEWAY HIGHER · UNIT 11 · 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 cheese pizza is cooked in an oven. How is energy transferred in the oven?**

A by conduction only, through the tray

B by evaporation from the cheese

C by radiation and convection

D by condensation on the oven walls

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2

A sandwich provides energy. Which process releases energy from food in cells?

A photosynthesis

B digestion

C fermentation

D respiration

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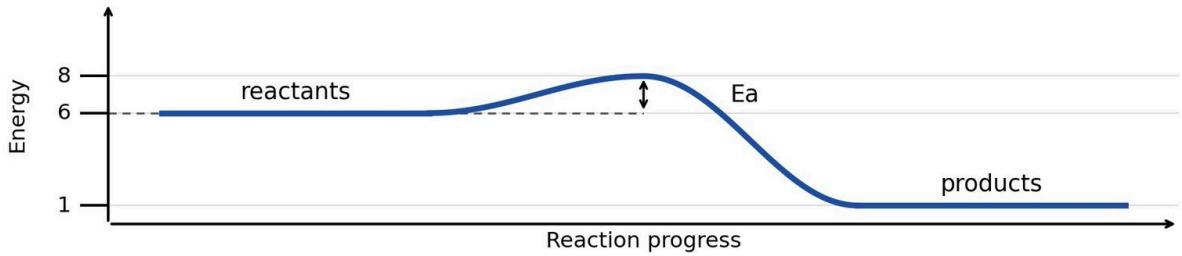
3 **The diagram shows the energy profile for a reaction. The reactants are at energy 6 and the products are at 1. Is the reaction exothermic or endothermic?**



A endothermic, energy is taken in

B exothermic, energy is given out

C endothermic, energy is given out

D exothermic, energy is taken in

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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 evaporates

D it expands

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

A by condensation on the cold cup

B by conduction and convection

C by radiation only, from the surface

D by evaporation only, from the top

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6 **A reaction should make 100 g of product but only makes 80 g. What is the percentage yield?**

- A 160%
- B 80%
- C 70%
- D 90%

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7 **What is the temperature used in the Haber process?**

- A 800 degrees Celsius
- B 200 degrees Celsius
- C 100 degrees Celsius
- D 450 degrees Celsius

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8 **What happens to the yield of ammonia if more nitrogen is added?**

A it increases

B the reaction stops

C it decreases

D it stays the same

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9 **Why does increasing the pressure of a gas increase the rate?**

A particles get smaller

B particles move more slowly in the gas

C particles are closer together

D the temperature falls

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10 **In an experiment, 20 cubic centimetres of gas are made in 30 seconds. What is the rate of the reaction?**

A 600 cm^3/s

B 1.3333 cm^3/s

C 0.6667 cm^3/s

D 0.3333 cm^3/s

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ANSWER KEY

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

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