ENGLAND GCSE CHEMISTRY EDEXCEL HIGHER · UNIT 7 · 10 QUESTIONS

Rates of Reaction and Energy Changes — 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 wristwatch is used to time a race. What is speed calculated from?**

- **A** distance and time
- **B** time only, not distance
- **C** distance only, not time
- **D** mass and time together

Understand It with Pulse | Flag a mistake

2 **A passenger train brakes. What force slows it down?**

- A lift
- B friction
- C gravity, pulling it down
- D thrust

Understand It with Pulse | Flag a mistake

3 **What does a steep graph of gas volume against time show?**

- A a slow rate of reaction
- B a reaction that has finished
- C a fast rate of reaction
- D a reaction with no gas made

Understand It with Pulse | Flag a mistake

4 **What must particles have to react when they collide?**

A enough energy

B the right colour

C a catalyst with them

D the same mass

Understand It with Pulse | Flag a mistake

5 **In a reaction, the energy needed to break bonds is 1200 kJ and the energy released making bonds is 1400 kJ. What is the overall energy change?**

A -200 kJ

B 200 kJ

C 1400 kJ

D -1200 kJ

Understand It with Pulse | Flag a mistake

6 **A solution has a concentration of 1 mol per cubic decimetre. How many moles are in 2 cubic decimetres of the solution?**

- A 4 mol
- B 3 mol
- C 1 mol
- D 2 mol

Understand It with Pulse | Flag a mistake

7 **In a second experiment, 30 cm cubed of gas are made in 15 seconds. What is the rate of the reaction?**

- A 3.5 cm^3/s
- B 2.5 cm^3/s
- C 1.5 cm^3/s
- D 2 cm^3/s

Understand It with Pulse | Flag a mistake

8

A reaction should make 100 g of product but only makes 90 g. What is the percentage yield?

A 80%

B 90%

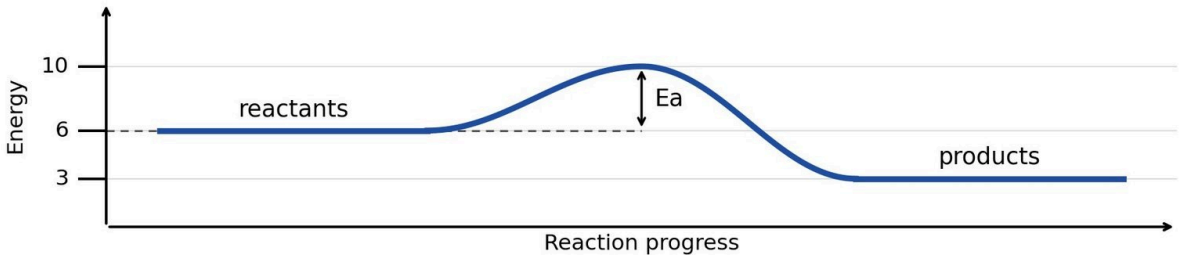
C 180%

D 100%

Understand It with Pulse

Flag a mistake

9 **The diagram shows the energy profile for a reaction. The reactants are at energy 6, the peak is at 10 and the products are at 3. What is the activation energy?**



A 4

B 16

C 3

D 7

Understand It with Pulse | Flag a mistake

10 **In an exothermic reaction, are the products higher or lower in energy than the reactants?**

A lower

B higher

C higher then lower

D the same

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.