

## Reaction Rates (MCQ)

1. What is the **main** reason for the increase in reaction rate with increasing temperature?

- A The activation energy decreases.
- B The activation energy increases.
- C More molecules have an energy greater than the activation energy.
- D The molecules collide more frequently.

Your answer

[1]

2. Which statement explains why the rate of a reaction increases when the temperature is increased?

- A. The activation energy for the reaction decreases.
- B. The activation energy for the reaction increases.
- C. The proportion of molecules exceeding the activation energy decreases.
- D. The proportion of molecules exceeding the activation energy increases.

Your answer

[1]

END OF QUESTION PAPER

# Mark scheme – Reaction Rates (MCQ)

Question			Answer/Indicative content	Marks	Guidance
1			C	1 (AO1.1)	<p><b><u>Examiner's Comments</u></b></p> <p>The role of activation energy in the rate of a reaction with increasing temperature was well-known and most candidates chose the correct option C. From the annotations on candidate scripts, many had ruled out options A and B entirely. D was anticipated as being the main distractor and this proved to be the case. Activation energy has a much greater effect than increasing collision frequency.</p>
			<b>Total</b>	<b>1</b>	
2			D	1	
			<b>Total</b>	<b>1</b>	