

Name: .....

Date: .....

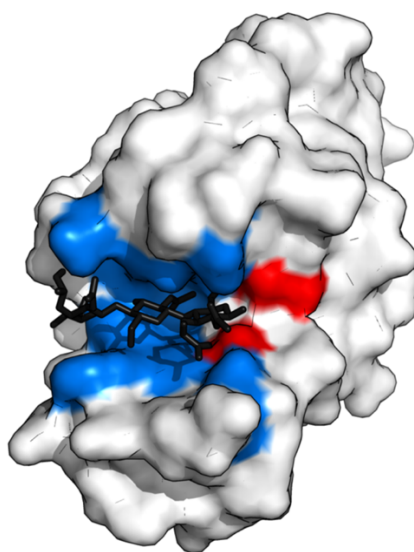
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**IGCSE BIOLOGY EDEXCEL 9-1**  
*CHAPTER WORKBOOK*

# Biological Molecules - Enzymes



## Enzymes

1. Define "enzyme".

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2. In the space below draw a diagram to outline the lock and key hypothesis. Include the below words as labels.

Enzyme

Substrate

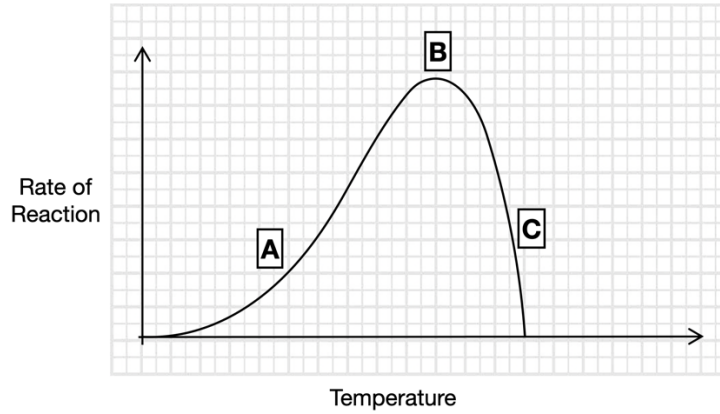
Enzyme-substrate complex

Active site

Products



3. The graph below shows how the rate of an enzyme-catalysed reaction changes over time.



a) Explain the rate of reaction at points A, B and C.

A	..... ..... .....
B	..... ..... .....
C	..... ..... .....

b) In terms of the active site state what happens when an enzyme becomes denatured.

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c) The enzyme presented in question 3 is an enzyme found in the human digestive system. State **and** explain what the temperature is likely to be at point B.

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d) Explain the effect of pH on the rate of an enzyme-catalysed reaction.

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