

# 2023 Year 12 Pre-Joining Transition Tasks: A-Level Biology



## Read:

Biological molecules are often polymers and are based on a small number of chemical elements. In living organisms carbohydrates, proteins, lipids, inorganic ions and water all have important roles and functions related to their properties. DNA determines the structure of proteins, including enzymes. Enzymes catalyse the reactions that determine structures and functions from cellular to whole-organism level. Enzymes are proteins with a mechanism of **action and other properties determined by their tertiary structure**. ATP provides the **immediate source of energy for biological processes**.

## Write:

Krabbe disease occurs when a person doesn't have a certain enzyme in their body. The disease affects the nervous system. Write a letter to a GP or a sufferer to explain what an enzyme is. Include how enzyme activity leads to the symptoms of Krabbe disease.

Your poster (max 200 words) should:

- describe the structure of an enzyme
- explain what enzymes do inside the body
- outline the faulty enzyme mechanism in Krabbe disease.

Email as one page word document or one slide power point slide to

[lkaur@holly-lodge.org](mailto:lkaur@holly-lodge.org)

by 9.00 am Fri 7th July 2023.



## Listen:

[An Introduction To The Biological Molecules | A-Level Biology Tutorial | AQA - Bing video](#)



## Watch:

<http://ed.ted.com/lessons/activation-energy-kickstarting-chemical-reactions-vance-kite>

<http://www.s-cool.co.uk/a-level/biology/biological-molecules-and-enzymes>