

A Level Biology

Please complete one line from the task box below. All students must complete the middle box.

Research the structure and function of a eukaryotic cell. Create a labelled diagram and describe the function of each organelle.	Create a mind map summarising the different types of biological molecules (carbohydrates, proteins, lipids, nucleic acids).	Describe the differences between prokaryotic and eukaryotic cells. Include diagrams.
Explain how enzymes work using the lock and key and induced fit models. Include a graph showing temperature or pH effects on enzyme activity.	Write a summary of DNA structure, including base pairing and the importance of hydrogen bonding.	Investigate the process of mitosis. Draw and label each stage. Describe what happens during each phase.
Watch a documentary or video on cell transport (e.g. osmosis, diffusion). Summarise key points and give examples.	Define and compare active and passive transport. Provide real-life examples in cells.	Read about the discovery of DNA's double helix structure. Who were the key scientists involved and what were their contributions?

Useful resources/websites

- <https://www.physicsandmathstutor.com/biology-revision/a-level-ocr-a/>
- Seneca
- <https://www.savemyexams.com/a-level/biology/ocr/17/revision-notes/>
- <https://cognitoedu.org/courseoverview/b3-alevel-ocr/lessons>

Suggested books/reading list

- The Immortal Life of Henrietta Lacks by Rebecca Skloot
- OCR textbook: A Level Biology for OCR A Student Book
- What is Life? By Paul Nurse
- The Gene: An Intimate History by Siddhartha Mukherjee