

TUPTON HALL
SUMMER PREPARATION TASK
A LEVEL BIOLOGY

Task 1 - Getting to know the specification from the exam board (2 x 30 min)

We use the **AQA specification**. Read pages 9-11 of the new AQA Biology specification

<http://www.aqa.org.uk/subjects/science/as-and-a-level/biology-7401-7402>

Then read through the subject content part of the specification as follows:

SECTION 3.1 Biological molecules (pages 12-19)

SECTION 3.2 Cells (Pages 20-25)

Make a poster / mind map on A3 (or two A4) paper for each section to summarise key parts of the two topics and the study requirements. Add as much detail as you think is useful. You could tick those topics that you already know something about.

Task 2 - Key terms (1 hour)

A level Biology seems to have its own language! Students often find the vast amount of new words over whelming and confusing.

Find out **definitions** of the selection of **40 useful key words** below. Try to write definitions in your own words to ensure that you fully understand them. You will go through these words in class throughout the course.

Task 3 - OPTIONAL Researching cell structure

Use the internet to research "Eukaryote cell structure" and make either a powerpoint or word document that summarises key information. Find out what a eukaryote cell is and look into plant and animal cells in detail. Select the best images to show all the main structures found in cells.

Add simple bullet notes about structure and function e.g:

Describe key features & facts about the organelle or structure (including size).

What does the organelle or structure do?

How does it do that?

What sort of cells have it?

Key things to research include: plasma membrane, cytoplasm, nucleus, mitochondrion, chloroplast, vacuole, cellulose cell wall, endoplasmic reticulum (rough & smooth), golgi apparatus, vesicles, lysosomes and centrioles.

KEYWORD LIST

WORDS

DEFINITIONS

Active site
Active transport
Aerobic respiration
Alpha helix
Arteriosclerosis
Atheroma
Benedict's test
Beta (pleated) sheet
Biuret test
Bronchioles
Condensation reaction
Diaphragm
Diffusion
Disaccharide
Epithelium
Eukaryote
Glucose
Glycogen
Glycosidic bond
Hydrogen bond
Hydrolysis reaction
Light microscope
Lipid
Monosaccharide
Mutualism
Organelle
Osmosis
Peptide
Peptide bond
Permeable
Plasma membrane
Polysaccharide
Primary structure
(protein)
Prokaryote
Scanning electron
microscope
Surface area to volume
ratio
Symbiosis
Transmission electron

microscope
Transpiration
Ventilation