Y11 Transition Task: Biology 2020

Welcome to A-Level Biology!

In Year 1 you will study a range of topics where the 'key themes/Biological ideas' involve shapes fitting together. In order for you to be successful on this course, you will need to have a good understanding of these key themes and be able to apply this knowledge into new topics. At the end of the course you will also be assessed on how well you can work synoptically (across topics).

1. Read and make notes/mind map about up to 5 of the topic areas listed below in which Biological shape is important.

2. Highlight any notes you have made that focus on the Biological importance of shapes fitting together e.g. when an oxygen molecule binds to haemoglobin it alters its shape making it easier for further oxygen molecules to bind, this is important because 'it allows haemoglobin to saturate and provide more oxygen for respiration'

3. Have a go at the essay question this will be 25 marks on paper 3 in Year 2, however you have only been asked to research and make notes on Year 1 content. Write a brief introduction and then up to 5 paragraphs explaining the importance of shape in each.

Proteins & Enzymes

3.1.2 Enzyme properties and digestion

3.1.2 Protein structure

3.1.3 Plasma membrane structure and cell transport

3.1.6 Antigens, antibodies, B cells & T cells

3.1.6 Vaccines

Nucleic Acids

3.2.2 Structure of DNA

3.2.5 DNA Replication

3.5.7 Transcription & translation

Physiology

3.2.4 Haemoglobin

Q1.

Essay

You should write your essay in continuous prose.

Your essay will be marked for its scientific accuracy.

It will also be marked for your selection of relevant material from different parts of the specification and for the quality of your written communication.

The maximum number of marks that can be awarded is

Scientific	16
Breadth of knowledge	3
Relevance	3
Quality of written communication	3

Write an essay on the following topic:

The importance of shapes fitting together in cells and organisms.

(Total 25 marks)