



Hampton Court House

Curriculum Outline 2019/20 – Year 10 Biology (HLJ)

Autumn 2019

Principal Text: *AQA GCSE (9-1) Biology by CGP*

Students will delve deeper into the World of the Cell. The topics covered will include: The light microscope, cell structure and function, stem cells and microbial growth.

We will then move on to study osmosis, diffusion and active transport and the heart and lungs.

Assessment of students' progress will be through a mixture of short quizzes in lessons and homework exercises, alongside lesson-to-lesson AfL and more formal mock examinations.

Students will embark upon GCSE topics starting with the fascinating world of 'cells' then move on to consider transport in plants, enzymes, pathogens and disease and finally genetics.

Many lessons will involve past AQA questions on the topic being studied, to begin to improve exam technique.

Links with fundamental values

Fundamental values are approached in a variety of topics in biology. Stem cells, communicable diseases and vaccination teach about individual liberty. The human genome and genetic diseases link to mutual respect. Ethics in science and public health issues are important ways of learning about democracy.

Social, moral, spiritual and cultural content
The topic of organ transplants and drug development allow students to consider social and moral issues. The use of antibiotics is an important social issue.

Opportunities to independently extend learning
Reading more advanced material such as A - level Biology Textbooks and New Scientist Magazine.

Requesting past papers from other syllabuses to experience a wider variety of question styles.
Regular consolidation of notes to check understanding.

Spring 2020

Principal Text: *AQA GCSE (9-1) Biology by CGP*

Pupils will further explore biological systems, learning about enzymes in digestion, the circulatory system and gas exchange.

We will then move on to consider health matters such as non-communicable diseases, viral and bacterial diseases, immunity and vaccinations.

Summer 2020

Principal Text: *AQA GCSE (9-1) Biology by CGP*

We will continue to cover health and immunity, including drug development and plant diseases.

In the final part of the year, we will consider plants and photosynthesis, aerobic and anaerobic respiration and metabolism.