AQA BIOLOGY

Induction

Course Content

 Year 12 Biology is made up of 4 topics which are examined in two separate examinations in June. If continuing in the second year with the A level course there will be three further exams that will assess knowledge and understanding from both year 12 and 13 Biology.

1. Biological molecules

Summary of content:Monomers & polymerscarbohydrateslipidsproteinsenzymesDNA & RNADNA replicationATPwaterinorganic ions

2. Cells

Summary of content:Eukaryotic, prokaryotic and virus cell structuretransportacross membranesmitosiscell recognition and the immune systemmicroscopy

3. Organisms exchange substances with their environment

Summary of content:Surface Area to volume ratiogas exchangedigestion and absorptionmass transport in plants and animals

4. Genetic information, variation and relationships between organisms

Summary of content: DNA, genes and chromosomesprotein synthesisgenetic diversityadaptationSpecies and taxonomydiversity within acommunityinvestigating diversity

Exams & Assessments

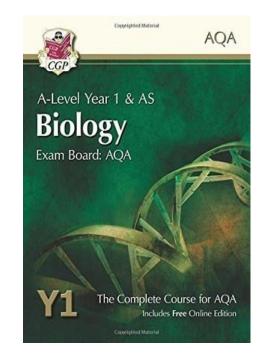
- Students will be assessed throughout the year. There are 4 topics is year 12 and an assessment at the end of each one.
- At the end of year 12, during the summer term all students will sit formal Internal Progression Exams (IPE's) in the hall.
- The biologists will sit two exam papers at this time. Each exam will be 1 hour 30 minutes.

Expectations

All students will be expected to maintain a high attendance level and it will be your responsibility to catch up with any work missed due to absence. You will need to buy a text book and a hard backed note book for use as a laboratory book (see below). You will be expected to study outside of school hours to extend your knowledge and understanding of the topics being taught and produce all work on the agreed deadlines. Failure of any of the above will result in yourself and your parents being asked to attend an interview with the Head of Biology and/or the Sixth Form Team to address these issues and if not resolved could result in removal from the course.

TEXT BOOKS

We will be using the following text book for AS AQA Biology: CGP A-Level Year 1 & AS Biology ISBN 978 1 78294 319 8



LAB BOOK

All students will be required to purchase a hard back ring binder folder complete with plastic wallets and dividers to be used as a lab book. This will be kept in school and will need to last for the two years of study.

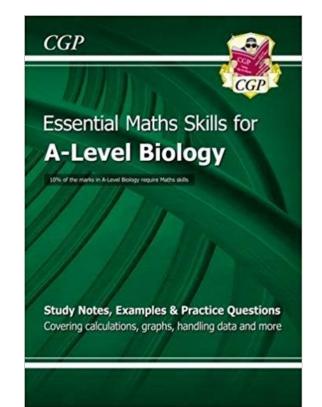
BRIDGING THE GAP BETWEEN GCSE & A

<u>LEVEL</u>

We have purchased a number of complimentary books that are designed to support students bridge the gap between GCSE Biology and A level Biology. These will be available for all Year 12 Biologists to take out on loan from the school library at the start of the autumn term. These books will need to be renewed every term and it is the responsibility of the students to ensure that they remain in good condition throughout the year. Each book will need to be returned to the library at the end of the AS course and students will be charged for loss or damage.

Maths Skills

 It is also recommended that students purchase one of the books available that cover the maths skills required in A level Biology. The new specification includes more maths than the previous one and around 10% of the marks require these maths skills. There are various books available but CGP have one entitled 'Essential Maths Skills for A-level Biology'.



SUMMER HOMEWORK

At the start of the Autumn term you will be given the entrance exam. The pass mark is 50%. During the summer you will need to revise the following GCSE topics:

Immune system

Transport across membranes

Heart

Structure of DNA

Enzymes

Magnification (A level)

<u>AS Biology Residential Field Trip – Investigating</u> <u>Populations & Environments</u>

During the summer term of Year 12 we will be running a residential fieldtrip to Flatford Mill in Suffolk. This trip offers an excellent opportunity for students that will enrich their knowledge and understanding of A level Biology.

At A level, the AQA specification places considerable emphasis on practical work including. The course to Flatford Mill provided by the Field Studies Council gives comprehensive coverage of much of the populations and ecology content from the A level course and will use fieldwork to allow students to gain a strong understanding of "How Science Works"; through the development and practice of investigative skills and through the consideration of how scientific evidence may be used to assess people's impact on the environment. In addition, we will carry out two of the six required core practicals in the field.

In addition, the course includes:

- Expert tuition by fully trained staff
- Rigorous and proven health and safety procedures including 24 hour emergency cover
- Full board

Specialist equipment and exclusive access to specially developed resources.





















