Science: Biology @ WBS Year 11 Roadmap

Subject Aim: You are continuing to build on your skills and knowledge and you are using correct terminology in order to describe and explain key ideas.

Topic 1 - Inheritance

You will learn about sexual and asexual reproduction, meiosis, DNA and the genome, genetic inheritance including the work of Mendel and inherited disorders.

P87-94 of the Biology revision guide.

Topic 2 – Variation and Evolution

In this topic you will learn about the causes of variation, natural selection, evolution and classification, fossils, extinction and speciation, artificial selection, cloning and genetic engineering.

P95-104 of the Biology revision guide

Topic 3 - Communities

You will learn about abiotic and biotic factors, adaptations and food chains. You will also learn about how to quantify the distribution of organisms including the use of quadrats in a required practical.

P106-111 of the Biology revision guide.

Topic 4 - Cycles

In this topic you will study the water cycle and the carbon cycle and the interactions within and between organisms and the environment. This topic includes a required practical for Triple students on decay.

P 112-115 of the Biology revision guide.

Topic 5 - Human Impact on the Environment

You will learn about biodiversity, waste management, land use, deforestation, global warming and maintaining ecosystems. P 116-119 of the Biology revision guide.

Topic 6 - Food chains and Biomass (Triple only)

Triple science students will learn about trophic levels, transfer of biomass, food security and farming biotechnology

P 120-124 of the Biology revision guide.

Assessment

There will be 3 formal Key assessments in Y11. Each will be a test of all of the content you have covered up to that point in time. You will be given the page references of the revision guides that you need to use 2-3 weeks prior to the assessment. The revision forms a key part of your homework. Your setting in Science will be reviewed at the start of the year and your performance will help to determine which examination route you take for your GCSEs, this decision being made close to Christmas.

Key Assessment 1	28 th June 2023
Key Assessment 2	1st December 2023
Key Assessment 3	5 th February 2024

Homework and Revision

Homework is based on exam questions. You will get a booklet of questions from each science teacher every month. You will complete a few questions each week and mark your answers using mark schemes released each week on Brightspace. In this way you will review the science content from year 9 and 10.

Revision for the assessments is set by the Head of Department several weeks before each assessment. You will have some revision time in class with your core teacher, but revision is a key component of your Homework.

You are strongly advised to revisit your notes often throughout the year, in order to minimise stress levels in the summer.

Enrichment themes

You will look at careers in science throughout the year. You will have the opportunity to engage with Science outside the classroom through STEM club (Science, Technology, Engineering, Maths)

TP and Autumn Term

Where Next?

6th form or college or an apprenticeship or a job. We all wish you the very best of luck.