# Science: Physics @ 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 - Atomic Structure

This topic covers the alpha particle scattering experiment, alpha, beta and gamma radiation, half-life and the uses and risks of radiation

P 43-48 of the Physics revision guide

## Topic 2 - Waves

In this topic you will learn about different types of wave, the electromagnetic spectrum and the behaviour of light P 73-91 of the Physics revision guide.

#### Topic 3 - Magnetism

In this topic you will study basic magnetism, electromagnets, the motor effect and the generator effect

P 92-99 of the Physics revision guide

## Topic 3- Space (Triple only)

This topic covers, fission and fusion, the life cycle of stars, red shift and the Doppler effect

P 49, 100-103 of the Physics 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 <sup>th</sup> June 2023
Key Assessment 2	1st December 2023
Key Assessment 3	5 <sup>th</sup> 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)

## Where Next?

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