# Science: Physics @ WBS Year 10 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 - Energy

This topic covers energy stores and transfers, kinetic energy calculations, gravitational potential energy calculations. Thermal energy calculations, power and efficiency.

P11-17 of the Physics revision guide

### Topic 2 - Particles

In this topic you will learn about density, internal energy, specific heat capacity and specific latent heat. States of matter, particles and gas pressure laws

P38-42 of the Physics revision guide.

# Topic 3- Momentum

This topic covers Forces and acceleration, how this relates to momentum in collisions and explosions. Resolving forces in 1 and 2 dimensions P54, 60, 61, 65, 70, 71

### Topic 4 - Electricity

This topic covers, Current, Voltage and Resistance. Series and parallel circuits. Components in circuits. Mains electricity and the national grid.

P24-36

#### **Assessment**

There will be 3 formal Key Assessments in Y10. 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 following each assessment. Your performance will help to determine which examination route you take at the end of Year 11.

you take at the end of real 11.	
Key Assessment	18 <sup>th</sup> September
1	2023
Key Assessment 2	22 <sup>nd</sup> January 2024
Key Assessment	29 <sup>th</sup> April 2024

#### Homework and Revision

Homework is set by your class teacher on Brightspace. You can expect to get 2 homework tasks per topic.

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.

#### **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?

In year 11 you will continue to develop your knowledge and practical skills in Physics. You will study; Atomic structure, Waves, Magnetism and Space (the space topic is only for students entered for the Triple Science examination)