Science: Physics @ WBS Year 9 Roadmap

Subject Aim: This is the start of your Science GCSE course. You will be building on the skills and knowledge you covered in Y7 and 8, but will be going into the topics in greater depth.

Topic 1 - Forces and Newton's laws

You will learn about the different forces and how they interact.

P51(Vectors and Scalars)

P52 (Weight and mass)

P60-61 (Speed and acceleration)

P55-56 (Elasticity)

P64-66 (Newton's laws)

Topic 2 – Motion and transport

You will learn more about speed, velocity and acceleration.

P60 (Speed and velocity, Typical speeds)

P61 (Acceleration)

P62 (Distance -time and Velocity -time graphs)

P63 (Terminal velocity)

P68 (Reaction times)

P67,69 (Stopping distances)

Topic 3 – Energy sources

You will be learning about what energy is, how the UK generates electricity and how to fight against climate change

P11 (Energy stores and transfers)

P18-22 (How we generate electricity and the advantages and disadvantages of each type)

P15-16 (Insulating the home)

Topic 4- Pressure

You will learn how to calculate pressure in a solid, atmospheric pressure, pressure in liquids and up thrust. This will continue on into the particles topic in year 10.

P58 (Pressure calculations)

P59 (Atmospheric pressure)

P59 (Pressure in liquids and up thrust)

Assessment

There will be 3 formal Key assessments in Y9. 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.

Tollowing cach assessment.	
Key Assessment	11 th September
1	2023
Key Assessment	11th December
2	2023
Key Assessment	15 th April 2024
3	

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 10 you will continue to develop your knowledge and practical skills in Physics. You will study; Energy, Particles, Electricity and Atomic Structure.