

Year 11 Physics Learning Programme 4

Reading texts that pupils will study during the learning programme

Loric for LP4 is Initiative

The value we are learning about is **Justice and Integrity**:

Justice - Fair behaviour or treatment

Integrity - Being honest and having strong moral principles

What will I be learning about in this Learning Programme?

Students are Learning about Space, including the Solar System and the Fundamental Theory of the Universe. Students will discover the key ideas underpinning the Universe, and Life Cycle of a Star.

Where have I seen this learning before?

In KS3 and KS2 students have learnt about planets and the Solar System.

What could I use it for?

In A Level Physics students study astrophysics

Week1 - The formation of the Universe, Week3 - Supernova Formation, Week5 - Orbits and Circular Motion

In LP4.1, I will know:	11/03/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how to describe the formation of the Universe; how to explain what a Proto star is, and the Process of Fusion; how to explain why the Sun is Stable.			Universe, Hydrogen, Helium, Fusion, Nuclear	Checkpoint Electromagnetism
In LP4.2, I will know:	18/03/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how to explain the Life Cycle of a Star; confidently understand how a Star's Lifecycle is related to Mass.			Red Giant, Dwarf Star, Neutron Star, Lifecycle	P15 Homework Electromagnetism 1
In LP4.3, I will know:	08/04/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how to predict how a Supernova is formed; how to describe the Force which keeps planets in Orbit. Extended Task			Pressure, Gas, Newtons, Gravity, Resultant, Motion	P15 Homework Electromagnetism 2
In LP4.4, I will know:	15/04/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
to describe that the Resultant Force acts towards the centre of Rotation; how to describe that velocity acts at a Tangent to the circular motion.			Newtons, Gravity, Resultant, Motion, Circular, Perpendicular	Progress Quiz - Electromagnetism 1
In LP4.5, I will know:	22/04/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how to describe the process of Red Shift; how to explain and analyse Red Shift and Blue Shift Graphically.			Hubble, Expansion, Movement, Rate	Progress Quiz - Electromagnetism 2
In LP4.6, I will know:	29/04/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how Hubble's Law dictates how the Universe is expanding; how the Big Bang Theory of the Universe; how the Universe is expanding. Extended Task			Hubble, Expansion, Movement, Rate	On your marks - Exam Skills
In LP4.7, I will know:	06/05/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
know what Background Radiation is; know what the evidence for the Big Bang is.			Hubble, Expansion, Movement, Rate, Background Radiation	Kerboodle Exam Questions
In LP4.8, I will know:	13/05/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how to consolidate all points from the topic.				Kerboodle Exam Questions
Resources to support learning:				
Kerboodle, SENeca, BBC Bitesize				
FFET Award Challenge for this Learning Programme:				
Attend an extra-curricular club, represent the academy at an event, attend an enrichment day, receive a subject praise postcard, attend a day trip, attend a head of year breakfast or afternoon tea, achieve 100 positive points on class charts, receive a letter of commendation from SLT, be invited to a wonderful Wednesday, receive a principals letter or be invited to a principals lunch, attend a residential trip, achieve the Duke of Edinburgh bronze award.				

PRT Task 1

PRT Task 2