

Year 10 Physics

Learning Programme 5

The LORIC skill focus for his LP is: COMMUNICATION. The Moral Virtues focus for this LP are: COURAGE and HUMILITY. Courage - Acting with bravery and overcoming fears. Humility - Having a modest view of oneself. What will I be learning about in this Learning Programme? The uses and dangers of nuclear radiation, nuclear fission and fusion. An introduction to Forces. Where have I seen this learning before? You have learnt about the particle model in KS3 and LP3. The structure of the atom is a fundamental concept that you learnt in KS3 and have since reviewed in Chemistry. During LP4, you learnt about radioactive decay and alpha, beta and gamma radiation. What could I use it for? You will learn more about the particle model and the nucleus in greater depth in A-level Physics and Chemistry. Nuclear power will be crucial as we look to move to more carbon neutral energy.			Literacy: <ul style="list-style-type: none">Capital letters must be used at the start of sentences and for the first letter of proper nounsFull stops must be used at the end of a sentenceQuestion marks must be used at the end of a questionApostrophes should only be used for possession or omissionDays of the week and months must be spelled correctlyKey words must be spelled correctly
In LP5.1, I will know:	12/05/25 - (WK 1)	Key Vocabulary	Homework
how to explain how contamination and irradiation can cause a risk to human health. Name common sources (natural and manmade) of background radiation; how to evaluate the perceived risks of using nuclear radiation - Alexander Litvinenko story.		Contamination Irradiation	Sparx science
In LP5.2, I will know:	19/05/25 - (WK 2)	Key Vocabulary	Homework
how to describe and explain uses of alpha, beta and gamma radiation in industry; how to describe medical uses of radiation.		Becquerel	Sparx science
LP5 RLW, I will: 02/06/25 - (WK 1)			
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.			Sparx science
In LP5.3, I will know:	09/05/25 - (WK 2)	Key Vocabulary	Homework
how to describe the process of nuclear fission; how to describe the working of a nuclear power station. Extended Task.		Fission Fusion	Sparx science
In LP5.4, I will know:	16/06/25 - (WK 1)	Key Vocabulary	Homework
how to revise in preparation for the mock exam; the exam skills to complete LP5 GCSE Physics mock examination.			Sparx science
In LP5.5, I will know:	23/06/25 - (WK 2)	Key Vocabulary	Homework
my strengths and areas for development following the assessment and PRT.			Sparx science
In LP5.6, I will know:	30/06/25 - (WK 1)	Key Vocabulary	Homework
how to describe the difference between a vector and a scalar quantity, with examples of scalars and vector; how to use scale diagrams to add two or more forces. How to resolve forces into horizontal and vertical components. Extended Task.		Scalar Vector	Sparx science
In LP5.7, I will know:	07/06/25 - (WK 2)	Key Vocabulary	Homework
how to describe name and describe different forces; how to calculate weight and mass using the equation $W = mg$, my own gaps in learning through PRT task and feedback.		Weight	Sparx science
Resources to support learning: Knowledge organisers, booklets, Physics and Maths Tutor, BBC Bitesize, Synergy.			
FFET Award Challenge for this Learning Programme: Complete a practice paper as part of your revision.			

PRT Task 1

PRT Task 2