

Year 10 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 the National Grid, and Particle Model. Students will learn how the theory of matter explains internal energy and changes of states.

Where have I seen this learning before?

Students have studied energy transfer and the particle model at KS3.

What could I use it for?

Students will study Specific Latent Heat and Specific Heat Capacity in A Level Physics.

Week 1 - The National Grid, Week 3 - The Particle Model, Week 5 - Gas Pressure

In LP4.1, I will know:	11/03/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how to describe the parts of the National Grid; how to describe and explain the function of Transformers.			Current, Voltage, Resistance, Charge, Amp Ohm	Checkpoint Quiz Molecules and Matter
In LP4.2, I will know:	18/03/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how to calculate the density equation; how to calculate density for regular shaped objects; how to calculate density for irregular shaped objects.			Mass, kilogram, Volume, Measuring Cylinder, Balance	Homework - Molecules and Matter 1
In LP4.3, I will know:	08/04/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how to explain the different states of matter in relation to the particle model; how to describe and name physical state changes; how to calculate Internal Energy.			Solid, Liquid, Gas, Melting, Boiling, Freezing, Evaporating, Sublimation	Homework - Molecules and Matter 2
Extended Task				
In LP4.4, I will know:	15/04/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how to use the Specific Latent Heat Calculations; independently and confidently re-arrange the SLH Equation for other variables.			Solid, Liquid, Gas, Melting, Boiling, Freezing, Evaporating, Sublimation	Progress Quiz - Molecules and Matter 1
In LP4.5, I will know:	22/04/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
know to describe the Quantities Associated with Gas Pressure; know how changing one of these variables affects another.			Volume, Pressure, Temperature, Pascals, Particles	Progress Quiz - Molecules and Matter 2
In LP4.6, I will know:	29/04/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
know how to measure Gas Pressure and Volume; how changing one of these variables affects another.			Volume, Pressure, Temperature, Pascals, Particles	On your marks practise 1
Extended Task				
In LP4.7, I will know:	06/05/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how Gas Pressure can be explained; how to use the particle model to illustrate Gas Pressure.			Volume, Pressure, Temperature, Pascals, Particles	Kerboodle Exam Questions
In LP4.8, I will know:	13/05/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how to graphically represent the Gas Laws; how to use the variables of Volume, Pressure and Temperature to draw conclusions.			Volume, Pressure, Temperature, Pascals, Particles	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.

