



Year 10 Physics Learning Map



- TERM 1 -

P6 Molecules and Matter

Matter makes up everything around us and matter cannot be created or destroyed but instead, they are just transformed into a different form. In this topic we explore the behaviour of particles in different states of matter and how energy causes changes to occur in these states of matter.

P7 Radioactivity

Radioactivity has played a vital role in both human medicine and the energy sector. Here we explore nuclear radiation in more detail and learn about the different applications of ionising radiations.



LINKS TO PRIOR LEARNING

Previously, you would have learnt about the properties of solids, liquids and gases. You would also have learnt about the different changes of states.

You would also have gained an in-depth understanding of the structure of an atom and its different sub-atomic particles. You would have also learnt, in brief, how a nuclear power station generates electricity.



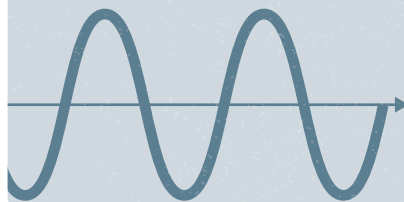
- TERM 2 -

P1 Changes in Energy

This topic explores the different energy stores and the ways in which they are transferred. It also investigates machines and appliances in terms of their efficiency.

P4 Electrical Circuits

Electricity is used in homes to power electrical appliances. The National Grid distributes electricity throughout the country. This topic explores the different properties of electrical circuits and how different electrical components are used to achieve different goals in an electrical circuit.



LINKS TO PRIOR LEARNING

Previously, you would have learnt about renewable and non-renewable energy resources and some of their effects on the climate.

In KS3, you would have learnt about the series and parallel circuits and the rules regarding voltage and current in each type of circuit.



- TERM 3 -

P5 Electricity in the Home

Electricity is important for operating all appliances, entertainment, lighting and all technology in our homes. This topic explores how electricity is generated and distributed to homes, where it is used to power different appliances.

P9 Forces and Motion

In this topic we look at the different forces that affect objects in the physical world. We also explore how to calculate speed, relative speed and acceleration. Then, we learn how to analyse journeys on distance-time and velocity-time graphs.



LINKS TO PRIOR LEARNING

Previously, you would have learnt about how electricity is generated in a power station and explored different energy stores and energy transfer pathways. You may also recall how to calculate efficiency of an appliance.

From KS2 and KS3 you would have learnt about some of the forces and their effects on objects. You will also have explored distance-time graphs.

