



Year 8 Science **Learning Programme 4**

Reading texts that pupils will study during the learning programme

Week 1: Heating and cooling, Week 3: Radiation

Week 5: Work

The value we are learning about is Justice and Integrity:

Justice-Fairbehaviourortreatment

Integrity - Being honest and having strong moral principles

What will I be learning about in this Learning Programme?

Students will learn about Energy and Forces.

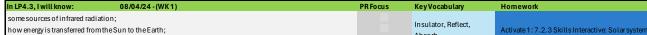
Where have I seen this learning before?

Students will have previously learnt about forces in Year 7 and Energy in KS3.

The content of this LP contains the foundation for Physics throughout KS3 and KS4.

In LP4.1, I will know:	11/03/24 - (WK 1)	PR Foo	cus	KeyVocabulary	Homework
the difference between energy and temperature; what the thermal energy of an object depends on; in terms of energy, why objects change temperature.				Thermal, Thermo meter, Temperature.	Activate 1: 7.2.3-7.2.4 Progress Quiz
In LP4.2, I will know:	18/03/24 - (WK 2)	PR Foo	cus	KeyVocabulary	Homework
how energy is transferred by particles; how to sketch diagrams to show convection currents; how a thermal insulator can reduce energy transfer.				Conductor, Convection, Radiation.	Activate 1: 7.2.1-7.2.1 Progress Quiz





the different insulation methods in terms of conduction, convection, and radiation.

Extended Task

In LP4.4, I will know:	15/04/24 - (WK 2)	PR Focus	KeyVocabulary	Homework
thevalueof gon Earth and on the moon;				
the difference between mass and	weight;		Gravitational force,	Activate 1: 7 part 1 Checkpoint assessment - test

Absorb.

Weight, Mass. $the formula to\ calculate\ your\ weight\ on\ different\ planets\ and\ explain\ changes\ in\ weight.$

In LP4.5, I will know:	22/04/24 - (WK1)	PRF	ocus	KeyVocabulary	Homework
what work is;					
what simple machines do;				Work, Displace, Deform.	Activate 1: 9.1.1-9.1.2 Progress quiz
the work needed to move object different distances.					



In LP4.6, I will know: 29/04/24 - (WK 2)	PR Focus	KeyVocabulary	Homework
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the energy content of food;			
the energy values of food and fuels;		Energy, Joule, Kilojoule.	Activate 1: 9.1.4 Skills interactive
the energy in foods and fuels with the energy needed for different activities.			
Extended Task			
In LP4.7, I will know: 06/05/24 - (WK1)	PR Focus	KeyVocabulary	Homework
the energy resources used to generate electricity; the advantages and disadvantages of different energy resources; how energy is transferred from an energy resource to an electrical device in the home.		Fossil fuel, Renewable, Non-renewable.	9.3 and 9.4 Glossary Quiz
In LP4.8, I will know: 13/05/24 - (WK 2)	PR Focus	KeyVocabulary	Homework
what you pay for when you pay your electricity bill;			
how to calculate the cost for homeenergy usage;		Watt, Power, Kilowatt.	
the energy usage and cost of running different home devices.			

sources to support learning:

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 awonderful Wednesday, receive a principals letter or be invited to a principals lunch, attend a residential trip, achieve the Duke of Edinburgh bronze award.