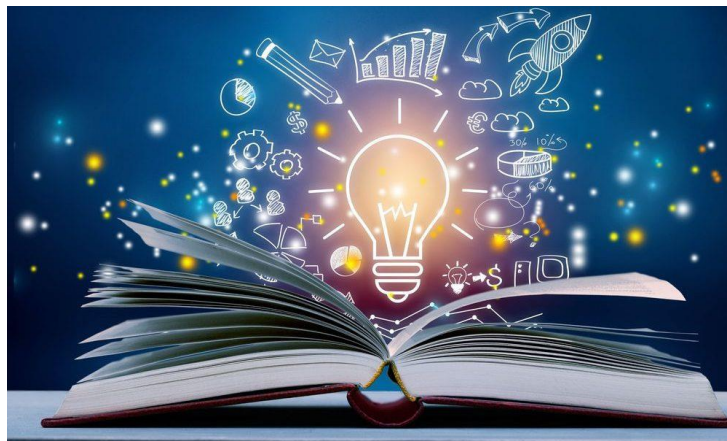


# Knowledge Organiser Booklet

Year 8 Summer Half Term 2




'Knowledge is the key  
to understanding,  
Understanding is the  
key to achieving'  
Penelope V. Yorke

Name: \_\_\_\_\_


Tutor group: \_\_\_\_\_

# Contents

- Home learning timetable
- Instructions on how to use a knowledge organiser
- English
- Maths
- Science
- Humanities
- Land and Environment
- Art
- Music
- MFL
- ICT



Education  
Endowment  
Foundation



**+5 months**

Research carried out by the Education Endowment Foundation proved that: Homework has a positive impact on average of + 5 months, particularly with pupils in secondary schools.

## Home learning timetable




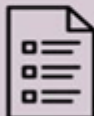




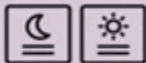







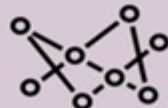

The table below details which days each subject will set home learning on each week. Students will have one week to complete home learning tasks for each subject.

Group	Monday	Tuesday	Wednesday	Thursday	Friday
8N	Art Humanities	Maths MFL	Science English	L&E Science	Music Reading
8E	Art Humanities	Maths English	L&E Science	Science MFL	Music Reading
8W	Humanities English	Art Maths	MFL Science	Science L&E	Music Reading

Please note you have two science teachers; science home learning will be set by both teachers

These knowledge organisers have been created by your teachers to support your learning both in class and for home learning. They are also a valuable revision tool for you to use independently when preparing for assessments. It is important that you make good use of your knowledge organisers by learning how to use them in different ways.

## How to use a knowledge organiser – step by step guide

	Look, Cover, Write, Check	Definitions of Key Words	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
Step 1	<p>Look at and study a specific area of your KO.</p> 	<p>Write down the key words and definitions.</p> 	<p>Use your KO to condense and write down key facts or information onto flash cards.</p> 	<p>Use your KO to create a mini quiz. Write down your questions using your KO.</p> 	<p>Create a mind map with all the information you can remember from your KO.</p> 	<p>Ask a friend or family member to have the KO or flash cards in their hands.</p> 
Step 2	<p>Cover or flip the KO over and write down everything you can remember.</p> 	<p>Try not to use your KO to help you.</p> 	<p>Add pictures to help support. Then self-quiz using the flash cards. You could write questions on one side, and answers on the other!</p> 	<p>Answer the questions and remember to use full sentences.</p> 	<p>Check your KO to see if there are any mistakes on your mind map.</p> 	<p>They can test you by asking you questions on different sections of your KO.</p> 
Step 3	<p>Check what you have written down. Correct any mistakes in green pen and add anything you have missed. Repeat.</p> 	<p>Use your green pen to check your work.</p> 	<p>Ask a friend or family member to quiz you on the knowledge.</p> 	<p>Ask a friend or family member to quiz you using the questions.</p> 	<p>Try to make connections, linking the information together.</p> 	<p>Write down your answers,</p> 



**6.1 - Key Dates in the Victorian Era and the Victorian Workhouse**

<b>1838</b>	Queen Victoria crowned aged 18.
<b>1840</b>	Queen Victoria married Prince Albert.
<b>1842</b>	Children under 10 can no longer work in underground mines.
<b>1844</b>	Children aged 8-13 can no longer work for more than 6.5 hours per day.
<b>1856</b>	Each county has to have its own police force.
<b>1861</b>	Prince Albert died of typhoid.
<b>1864</b>	Children under 10 can no longer work as chimney sweeps.
<b>1870</b>	Schools are built for children aged 5-10.
<b>1872</b>	The first FA Cup Final takes place.
<b>1880</b>	The Education Act makes schooling compulsory for all children aged 5-10.
<b>1901</b>	Queen Victoria dies and Edward VII becomes King.

Between 1837 and 1901 when Queen Victoria reigned over Britain, there was a huge contrast between how the rich and poor Victorians lived. Queen Victoria led the expansion of the British empire and saw major changes to all aspects of Britain due to exciting discoveries and inventions.

Huge buildings built for very poor people to live and work.	Whole families would move in together but men, women and children were all kept separate.
Food was very basic including bread, porridge (gruel), watered down milk and occasionally meat and potatoes.	Children had to have 3 hours of reading, writing, arithmetic and Christian religion lessons.
Jobs for men included working the field, breaking stones and chopping wood.	Jobs for women included laundry, sewing and scrubbing the floors.
Girls' education was learning to sew, knit and how to be a servant.	In 1930, workhouses were closed for good. Some of the buildings were used as part of the National Health Service.

**6.2 - Key Vocabulary**


<b>agricultural</b>	Used for farming or relating to farming and farm practices.
<b>arithmetic</b>	The process of working with or learning about maths and numbers.
<b>coal mine</b>	A place where coal is dug from the ground for the purpose of domestic or industrial use.
<b>industry</b>	A group of companies that all produce the same thing.
<b>Industrial Revolution</b>	A time of major change in the way products were made.
<b>invention</b>	A new thing that someone has made.
<b>livestock</b>	Farm animals regarded as an asset.
<b>migrate</b>	Move to a different area to find work or better living conditions.
<b>reign</b>	To lead or control a country.
<b>rural</b>	The area and events in the countryside.
<b>revolution</b>	A big change in something.
<b>typhoid</b>	A bacterial infection that can spread throughout the body.
<b>Victorian</b>	Any term, object, movement, event or group of people living or created during the reign of Queen Victoria (for example, 'Victorian chimney sweeps')

6.3 – Essay-writing Techniques

Structuring Persuasive Arguments


<b>P</b> oint	<b>The writer gives the impression that...</b>
<b>E</b> vidence	<b>In the line ' _____ ',</b>
<b>E</b> ffect on the reader	<b>This suggests/implies/depicts It makes the reader envision / imagine / sympathise</b>
<b>L</b> ink back to the question or context	<b>The poet was inspired by ----- which links the message that</b>


Using Paragraphs




**PARAGRAPHS**  
Make them  
**TIP TOP**  
For a new

**Time Place Topic Person**  
start a new paragraph

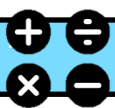




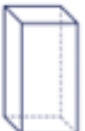




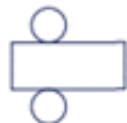









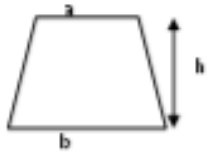



6.4 – DAFOREST – Persuasive Writing

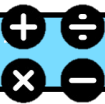
Rhetorical Devices / Techniques: DAFOREST 

Technique	Explanation	Example
<b>Direct Address</b>	Addressing the reader directly using pronouns e.g. "we" or "you".	"You can stop the spread of coronavirus by staying at home"
<b>Anecdote</b>	A short personal story that provides an example related to the topic	"The crime rate in Amsterdam dropped significantly when they legalised cannabis"
<b>Facts</b>	Something which can be proven true	"'E' is the most common letter in the English language."
<b>Opinions</b>	A belief which cannot be proven true – someone's ideas.	"Exeter City is the greatest football club of all time"
<b>Rhetorical Question</b>	A question which does not require a response.	"Do you want to pass your exams?"
<b>Emotive Language</b>	Words which provoke an emotional response from the audience.	"This ludicrous idea will result in utter catastrophe."
<b>Statistics</b>	Numerical facts and data used to support a point.	"12% of people worldwide have never used the internet"
<b>Three (rule of)</b>	List of three things in a sentence.	"Smoking is a filthy, selfish and costly habit"



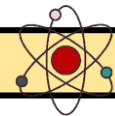
Key Term	Definition	Shape	Net
Cube	6 square faces 12 edges 8 vertices		
Cuboid	6 rectangular faces 12 edges 8 vertices		
Triangular Prism	5 faces 9 edges 6 vertices		
Cylinder	3 faces 2 edges 0 vertices		
Square-based Pyramid	5 faces 8 edges 5 vertices		
Triangular-based Pyramid	4 faces 6 edges 4 vertices		
Cone	2 faces 1 edge 1 vertex		
Sphere	1 face 0 edges 0 vertices Half a sphere is known as a hemisphere.		

Key Term	Definition
Area of a trapezium	$\frac{a + b}{2} \times h$ 
Face	A face is a single flat surface.
Edge	An edge is a line segment between two faces.
Volume	<p>The amount of 'space' a solid object occupies. Units: <math>mm^3</math>, <math>cm^3</math>, <math>m^3</math>, etc. The volume of a prism <math>V = \text{Area of Cross Section} \times \text{Length}</math></p>  <p>The volume of a cylinder <math>V = \pi r^2 h</math></p> 
Volume of a cube / cuboid	Length x width x height
Prism	A 3D shape with a constant cross-section.
Cross-section	The 2D shape that is consistent throughout the prism



Key Term	Definition	
Vertically Opposite Angles	Vertically opposite angles are equal	
Alternate Angles	Alternate angles are equal	
Corresponding Angles	Corresponding angles are equal	
Co-interior Angles	Co-interior angles add up to 180°	

Key terms	Definition
Sum of all angles in Polygons	n is the number of sides $(n - 2) \times 180$
Interior angle in a regular polygon	$\frac{(n - 2) \times 180}{n}$
External Angles	The angle between a side of a polygon and an extended adjacent side 
Exterior angle regular polygon	$\frac{360}{n}$



These are words used in science investigations. Learn to spell these key words and know their meanings.

**Data** : Information that has been collected.

**Evidence** : Data which is valid.

**Calibration** : Marking a scale on a measuring instrument.

**Resolution** : This is the smallest change in the quantity being measured that gives a change in the measurement reading.

**Range** : The maximum and minimum values of the independent or dependent variables.

**Interval** : The size of the gap between the values of the independent variable.

**True value** : This is the value that would be obtained in an ideal measurement.

**Accuracy** : A measurement that is close to the true value.

**Uncertainty** : The interval within which the true value can be expected to lie. Whenever a measurement is made, there will always be some uncertainty or doubt about the result obtained.

**Measurement error** : The difference between a measured value and the true value.

**Random error** : These cause readings to be spread about the true value, due to results varying in an unpredictable way from one measurement to the next.

**Systematic error** : These cause readings to differ from the true value by a consistent amount each time a measurement is made.

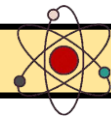
**Zero error** : A false reading when the true value of a measured quantity should be zero.

**Anomalies** : These are values in a set of results which are significantly different to the other measured values.

**Precision** : Precise measurements are ones in which there is very little spread about the mean value.

Random errors are present when any measurement is made, and cannot be corrected.

The effect of random errors can be reduced by making **repeat** measurements and calculating a **mean** value.



These are words used in science investigations. Learn to spell these key words and know their meanings.

**Variables** : These are physical, chemical or biological quantities or characteristics.

**Independent variable** : This is the variable for which values are changed or selected by the investigator.

**Dependent variable** : This is the variable of which the value is measured for each and every change in the independent variable.

**Control variables** : These may affect the outcome of the investigation and therefore have to be kept constant.

**Categoric variables** : These have values that are labels, eg names of plants or types of material.

**Continuous variables** : These can have values that can be counted or measured.

**Fair test** : A fair test is one in which only the independent variable has been allowed to affect the dependent variable.

**Repeatable** : A measurement is repeatable if the same person repeats the investigation using the same method and equipment and obtains the same results.

**Reproducible** : A measurement is reproducible if the investigation is repeated by another person, or by using different equipment or techniques, and the same results are obtained.

**Validity** : The investigation answers the question being asked.

**Valid conclusion** : A conclusion supported by valid data, obtained from an appropriate experimental design and based on scientific reasoning.

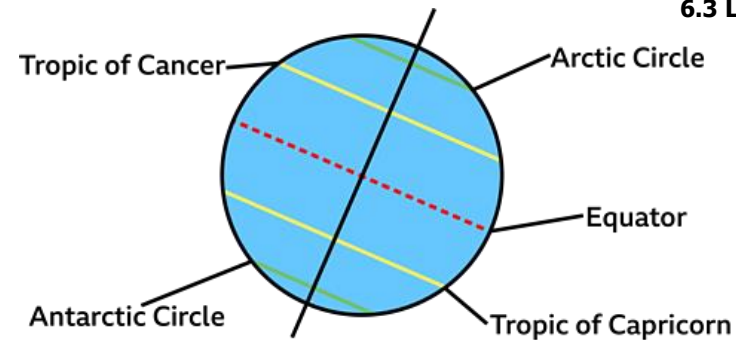
You will need to know all these terms for your Science GCSE that starts in September Year 9.



6.1 KEY TERMS	
<b>6.1.1. Longitude</b>	Parallel lines on an atlas map drawn horizontally north and south of the Equator.
<b>6.1.2. Latitude</b>	Lines on an atlas map drawn vertically between the North and South Poles.
<b>6.1.3. Equator</b>	The Equator is an imaginary line that circles the Earth halfway between the North and South Poles. It's a circle of latitude at 0 degrees, dividing the planet into the Northern and Southern hemispheres. This imaginary line is approximately 40,075 kilometers (24,901 miles) in circumference.
<b>6.1.4. Tropic of Cancer</b>	A line of latitude that marks the northern most point where the sun can be directly overhead. It's located at 23° 26' 22" north of the Equator.
<b>6.1.5. Tropic of Capricorn</b>	A line of latitude located 23.5 degrees south of the Earth's equator. It marks the southernmost point on Earth where the sun can be directly overhead.
<b>6.1.6. Arctic Circle</b>	The Arctic Circle is a line of latitude located at approximately 66°33' North of the equator. It marks the southern boundary of the area where the sun remains continuously above or below the horizon for at least one day of the year.
<b>6.1.7. Prime or Greenwich Meridian</b>	The line of 0° longitude, the starting point for measuring distance both east and west around Earth. The prime meridian is arbitrary, meaning it could be chosen to be anywhere, but historically runs through Greenwich in London which is home to the Royal Observatory.
<b>6.1.8. North/South Pole</b>	The North Pole is at the northernmost point of the Earth, while the South Pole is at the southernmost point on the Earth.

6.2 Our Underwater World	
<b>6.2.1. Mid-Atlantic Ridge</b>	A mountain chain that runs north to south in the middle of the Atlantic Ocean.
<b>6.2.2. Mariana Trench</b>	The <b>Mariana Trench</b> is an oceanic trench located in the western Pacific Ocean, about 200km (124 miles) east of the Mariana Islands; it is the deepest oceanic trench on Earth.
<b>6.2.3. Challenger Deep</b>	This is the deepest part of the Mariana Trench and is approximately 10,935 meters (35,876 feet) deep.

**6.3 Latitude & Longitude**



6.4 Our Physical Planet	
<b>6.4.1. Continents</b>	There are 7 continents; North America, South America, Europe, Asia, Africa, Australasia (Oceania) and Antarctica.
<b>6.4.2. Oceans</b>	There are 5 oceans; Atlantic, Arctic, Indian, Pacific and Southern. The Pacific Ocean is the largest.
<b>6.4.3. Mountains</b>	The Earth has many mountain ranges, with the Himalayan mountain being the highest above sea level. Mount Everest in Nepal is the world's highest mountain.



## This topic is about Eco-school.

**What is Eco-school?** An **Eco-School** is a school that is committed to improving its environmental performance and educating students about sustainability and eco-friendly practices.

### **Key aims:**

Reduce the school's environmental impact  
Engage students in real-world sustainability issues  
Empower young people to lead environmental change



## Our chosen topics

1. Waste
2. Healthy Living
3. Improving the school grounds

### **What is the eco-school programme?**

**Eco-Schools** is an international award programme that encourages schools to take action on environmental issues and promote sustainability in their everyday operations and curriculum. It is coordinated globally by the **Foundation for Environmental Education (FEE)** and run in the UK by **Keep Britain Tidy**



### **7 Steps to Eco-schools:**

**Eco-Committee** – A group of students and staff who lead the project

**Environmental Review** – Assess the school's current environmental impact.

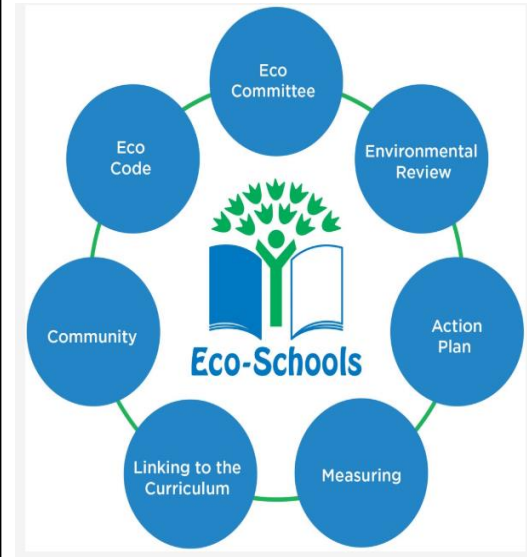
**Action Plan** – Set goals and plan improvements.

**Monitoring and Evaluation** – Track progress and adjust where needed.

**Curriculum Links** – Include environmental topics in lessons.

**Informing and Involving** – Share the work with the whole school and community.

**Eco-Code** – A statement of the school's environmental values.





In this project we will be exploring the different ways artists present **places** and how they express their feelings about them.



**REFLECTIONS**

**Painting:**  
Acrylic,  
pointillism, colour  
theory



**CITYSCAPES**



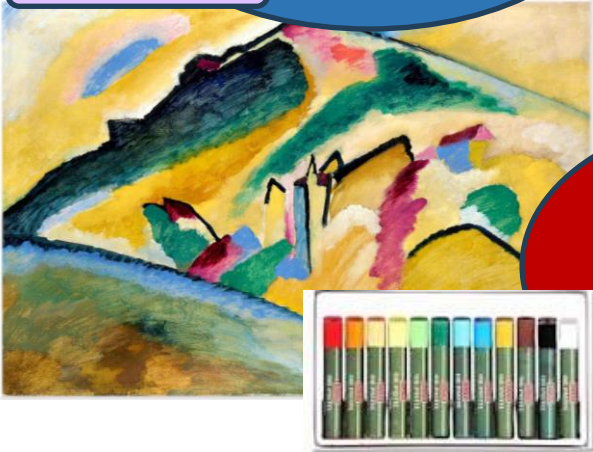
**LANDSCAPES**



**PERSPECTIVE**

**Painting:**  
Watercolour,  
blending, wet  
wash

**ABSTRACT**



**COLOUR THEORY**

**Oil pastel:**  
Blending,  
directional lines,  
tone, texture

**Drawing:**  
Pencil, charcoal,  
fineliner, cross-  
hatching



**ARCHITECTURE**
















Key vocabulary
Line
Pattern
Blending
Contrast
Colour theory
Abstract
Cross-hatching
Wet wash
Mixed media
Composition
One point perspective
Architecture
Pointillism
Cubism

*Artists we will study:* Wassily Kandinsky, Paul Klee, Friedensreich Hundertwasser, Georges Seurat, Ian Murphy, Nathan Walsh



1. The Musical Elements are the basic building blocks of all music






<b>Tempo</b>	 	<b>fast or slow</b>
<b>Texture</b>	 	<b>thick or thin</b>
<b>Timbre</b>	 	<b>the specific sound an instrument makes</b>
<b>Dynamics</b>	 	<b>loud or quiet</b>
<b>Duration</b>	 	<b>long or short notes</b> <b>Rhythm</b> is the pattern of long or short notes
<b>Structure</b>		<b>layout</b> of a piece (How it is put together)
<b>Pitch</b>	 	<b>high or low</b> A <b>melody (tune)</b> has different pitches of notes

2. Keywords

Sound effects	artificially created or enhanced sound
Sampling	the technique of reusing sounds and music as part of a composition
Chromatic movement	step movements using all of the black and white notes (semitones)
Staccato	short spiky notes
Legato	long smooth notes
Syncopated	off-beat rhythms
Leitmotif	a recurring musical theme, associated with a particular character, place or idea

**THE TREBLE CLEF**

Every Good Boy Does Fine FACE

Semibreve 4 beat note	Minim 2 beat note	Crotchet 1 beat note	Quaver ½ beat note	Semi-quaver ¼ beat note
				



TOP 5 HISPANIC HERITAGE SITES:

**1. Historic Centre of Mexico City, Mexico:**

This UNESCO World Heritage site is a vibrant mix of pre-Hispanic, colonial, and modern architectural styles, showcasing the rich history of the capital.

**2. Historic Sanctuary of Machu Picchu, Peru:**

Machu Picchu is a breath taking Inca citadel, offering a glimpse into pre-Hispanic life and engineering.

**3. Cartagena, Colombia:**

A walled city with stunning colonial architecture and a rich history, Cartagena is a UNESCO World Heritage site.

**4. Old Havana, Cuba:**

This historic centre, with its blend of colonial and baroque architecture, is a UNESCO World Heritage site and a vibrant cultural hub.

**5 Barcelona city**

This is Spain's second largest city and the most visited in Spain. The city has a world-famous cathedral called the 'Sagrada Familia' (sacred family) which has been under construction for over 100 years. It also boasts a famous covered market and was an Olympic city.



HISPANIC TRADITIONS

**Cinco de Mayo:**

Celebrates the Mexican victory at the Battle of Puebla in 1862

**New Year Traditions:**

Many Hispanic countries have unique New Year customs, such as eating 12 grapes for good luck, or consuming lentils for prosperity.

**Fiesta Quinceañera (or Fiesta Rosa):**

A coming-of-age celebration for young women, marking their transition to adulthood.

**Carnaval:**

A period of revelry with parades, music, and costumes, particularly in areas like Cádiz and Tenerife.

**Las Fallas de Valencia:**

A vibrant festival with giant papier-mâché figures, fireworks, and music.



## Summary of key information:

A **stakeholder** is an individual or group that has an interest in a company and can either affect or be affected by the business, for example employees, customers, suppliers, investors and competitors

	Key Issue	Examples
<b>Ethical Issues</b> are issues about what would be considered right or wrong by society	<b>Privacy</b>	Providing personal information, selling personal data, targeted advertising
	<b>Censorship</b>	Restricting access to information, censorship of foreign websites, pornography and gambling
	<b>Surveillance</b>	Government intelligence agencies, Internet Service Provider (ISP) tracking
<b>Cultural Issues</b> are about how groups of people with particular beliefs, practices or languages may be affected	<b>Automation</b>	Human jobs are replaced by machines, people don't trust machines, machines can be impartial
	<b>Social Well Being</b>	Influenced to upgrade to new technology, peer pressure for new devices, technological intrusion
	<b>Cyberbullying</b>	Using technology to cause deliberate harm, causes serious distress, also includes sexting
	<b>Cultural Changes</b>	Selfies, attention seeking, self obsession, viral videos, memes, increasingly used for political gain
	<b>Business Methods</b>	Music and TV streaming, sharing economy (e.g. Uber, Airbnb) drawing traditional customers
	<b>Digital Divide</b>	Access to technology effected by wealth, location (urban or rural), knowledge, age, global divide
<b>Environmental Issues</b> are about how we impact upon the natural world	<b>Natural Resources</b>	Devices contain raw materials, plastics come from crude oil, precious metals
	<b>Energy</b>	Use of electricity requires oil, gas and coal. Server rooms require air conditioning for cooling
	<b>E-Waste</b>	Modern devices have short lives, short warranties, encouragement to upgrade, WEEE directive
<b>Legal Issues</b> are about what's actually right and wrong in the eye of the law	<b>Data Protection</b>	Controlled through the Data Protection Act and Freedom of Information Act
	<b>Computer Misuse</b>	Controlled through the Computer Misuse Act
	<b>Intellectual Property</b>	Controlled through the Copyright, Designs and Patent Act and Creative Commons

**Key terms:** Stakeholder, Ethical, Cultural, Environmental, Privacy, Legal, Censorship, Surveillance, Automation, Cyberbullying, Trolling, Digital Divide, Energy, E-Waste, Data Protection, Freedom of Information, Creative Commons