

Knowledge Organisers

1st Summer Term

Science

History

Geography

Art

PSHE

Latin

Computing

R.E.

P.E.

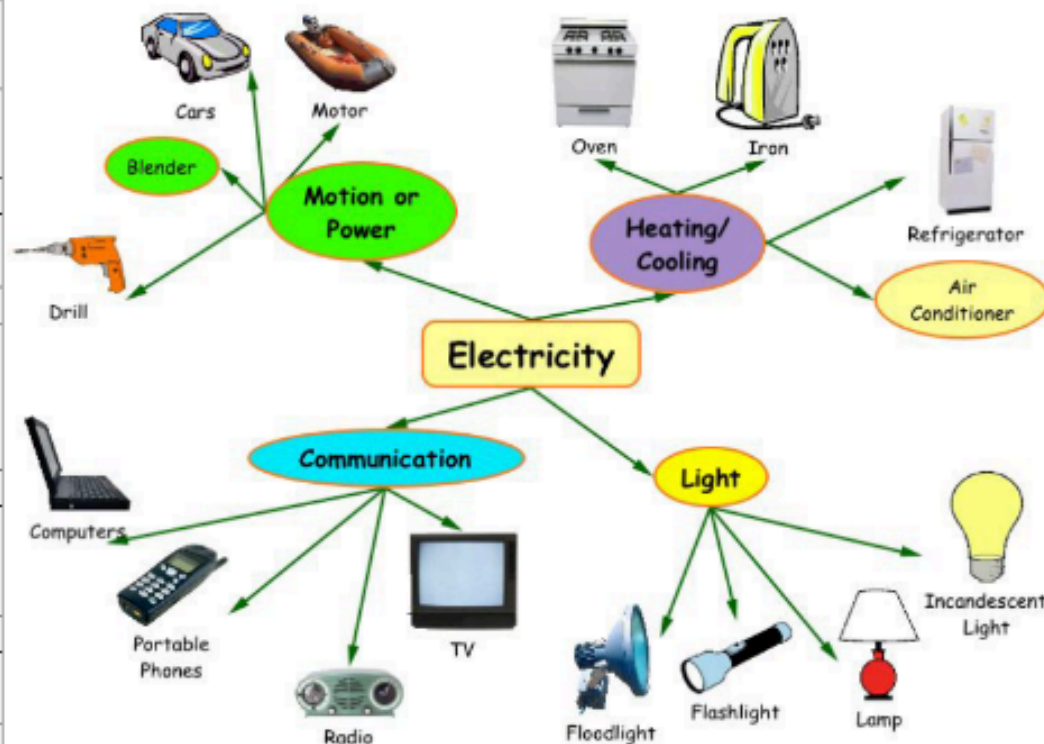
Swimming

Music

Year 4

Knowledge Organiser – Science – Year 4 – Electricity

Uses Of Electricity In Our Daily Life



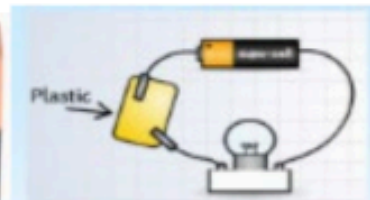
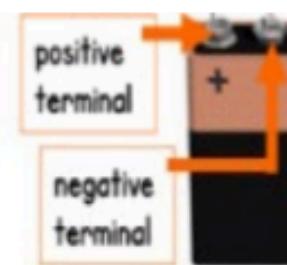
Key Vocabulary	Definition
electricity	energy made available by the flow of electric charge through a conductor
conductor	a substance that allows heat or electricity to pass through or along
insulator	a substance that does not allow heat or electricity to pass through or along
component	a part that can be separated from or attached to a system
circuit	an electrical device that provides a path for electrical current to flow
current	a flow of electricity through a wire or circuit
static electricity	static electricity is the build up of an electrical charge on the surface of an object. It's called "static" because the charges remain in one area rather than moving or "flowing" to another area like an electrical current.
electron	an elementary particle with negative charge
appliance	a device or machine often in your home that you use to do a job such as cleaning or cooking - appliances are often electrical
negative charge	having a surplus of electrons; having a lower electric potential
positive charge	having a deficiency of electrons; having a higher electric potential
electromagnet	a magnet which attracts metals only when electrically activated
atom	the smallest, indivisible constituent part or unit of something.

Key Knowledge
I know the main uses of electricity.
I know the components and symbols of a basic electrical circuit.
I understand the difference between a current and static electricity.
I understand the importance of conductors and insulators.
I know what an electromagnet is.



Electrical circuits can be represented as circuit diagrams.

A battery is the power source in a circuit. It has two terminals



Plastic does not conduct electricity. We use plastic as an electrical insulator. Can you think of other materials that are electrical insulators.

Knowledge Organiser - History – Year 4 – Early Stuarts, Gunpowder and Civil War.

Key Vocabulary:





Divine right of kings	The belief that kings are chosen by God and therefore should have all the power.
Plot	A secret plan made by a group of people to do something illegal or harmful.
The Gunpowder Plot	A plot, led by Robert Catesby, to blow up the Houses of Parliament on the 5 th November.
Union of the crowns	When King James VI of Scotland became King James I of England, this united the two kingdoms under one crown.
Monteagle letter	The letter received from Lord Monteagle from Francis Tresham, warning him of the Gunpowder Plot. The letter was given to James I who was able to capture Guy Fawkes.
Treason	A crime where a person betrays their country. This includes trying to kill their king.

Key Knowledge:

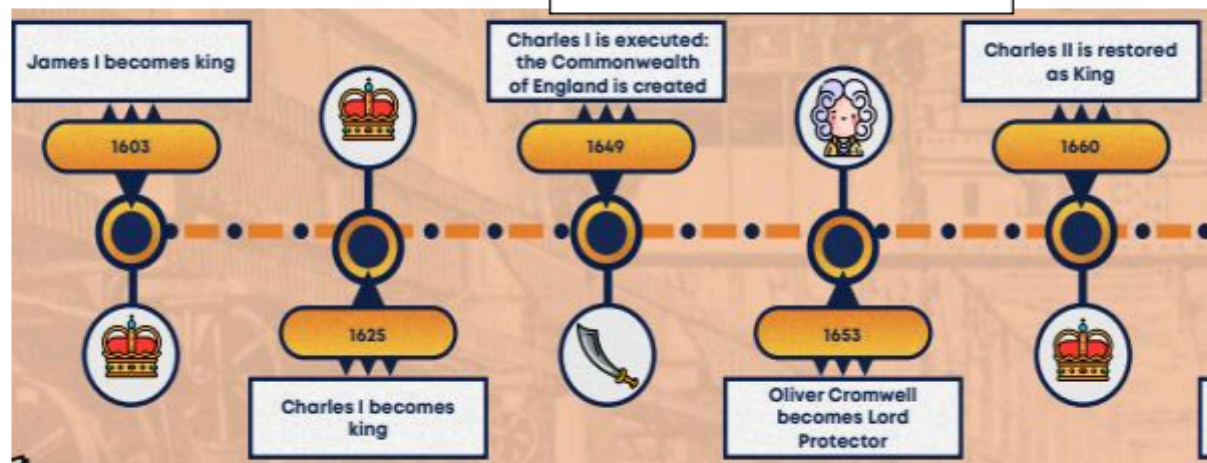
I know the James I believed in the divine right of kings and didn't treat Catholics well.
I know that James I was unpopular with lots of people at the time.
I know that there was a plot to blow up the Houses of Parliament, known as the Gunpowder plot, led by Robert Catesby
I know that the plot was discovered when a letter was shown to the king, and Guy Fawkes was discovered with 36 barrels of Gunpowder



Key people

James I	James I was the King of England (and Scotland). He was a Protestant and believed in the 'divine right of kings'.	
Robert Catesby	He was the leader of the Gunpowder Plot.	
Francis Tresham	He wrote a letter to his friend telling him not to go to parliament.	
Guy Fawkes	He was a soldier and one of the plotters. He planned to blow up the Houses of Parliament and was caught.	

Houses of Parliament, London



Knowledge Organiser – The South West – Geography – Year 4

Key Vocabulary	Definition
coastline	The line of the coast, where the land meets the sea
The Gulf Stream	A current of warm water that moves across the Atlantic Ocean before reaching the South West of England
county	England is split up into areas called counties, these areas have their own councils who make decisions about local issues
arable land	Land used for growing crops for farming
pastoral land	Land used for raising animals for farming
Area of Outstanding Natural Beauty	A special area of land that is protected because of its beauty and importance
moor	A large area of land where no crops are grown, often covered in heather
tourism	When people travel to an area for a holiday

Landmark	Image
Stonehenge	
Glastonbury Tor	
Tintagel Castle	
The Eden Project	



Key Knowledge

- I understand that the coastline of the South West has been changed by erosion.
- I know where the main cities/ towns are in the South West.
- I understand that tourism is a major industry in the South West.
- I understand that dairy farming is an important industry in the South West.

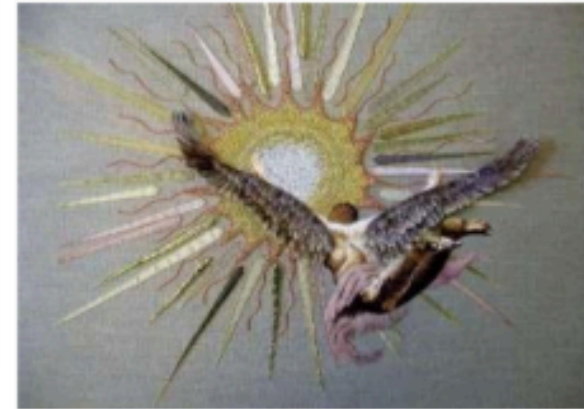
Knowledge Organiser - Design - Visual Arts - Year Four

Key Vocabulary:

Embroidery	The art of decorating cloth with stitches
Cross-stitch	Two diagonal stitches making up one stitch in the shape of an X
Tapestry	A woven artwork made of wool
Warp	Threads held tightly on a loom ready for the weft to pass over and under
Weft	Coloured woollen threads that are passed in and out when weaving a tapestry
Loom	A device to weave cloth and tapestry
Motif	A pattern or image that is often repeated
Applique	When fabric is cut out and sewn onto a larger piece of fabric to create a picture or pattern

Key Knowledge:

I know what cross-stitch is.
I know what motifs and symbols are.
I know what a tapestry is.
I know how to weave.



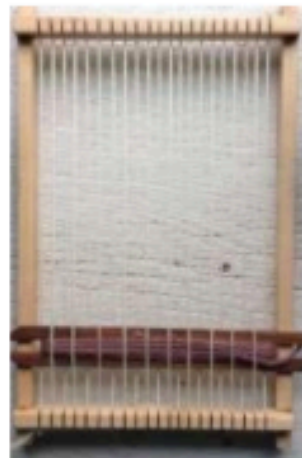
Icarus
by Kate Farrer 2012



**Kate Middleton's
Wedding Dress**



**Queen Elizabeth
I coronation
dress**



**A loom with warp
and weft**



**Christ's Charge to Peter. Tapestry
from original cartoon by Raphael**

Knowledge Organiser – PSHE – Relationships - Year Four



Key Vocabulary	
Relationship	The way in which two people, groups or countries behave towards each other or deal with each other.
Distant	Not having a close relationship with somebody.
Belonging	The feeling of being comfortable and happy in a particular situation or with a particular group of people.
Loss	The death of a person or something special.
Sadness	The feeling of being sad.
Memorial	A thing that will continue to remind people of somebody/something.
Vegetarian	A person who does not eat meat or fish.
Debate	A formal discussion of an issue at a public meeting or in a parliament. In a debate two or more speakers express opposite views and then there is often a vote on the issue.

Key Knowledge
I can identify the web of relationships that I am part of, starting from those closest to me and including those more distant.
I can explain different points of view on an animal rights issue.
I know how to show love and appreciation to the people and animals who are special to me.



Reflective questions
Ask me this...
Who in your family and friends are special to you?
What feelings might people experience when they lose someone close to them?
What are your opinions on being a vegetarian?

Latin Knowledge Organiser - Unit 11: A sad day



Key Vocabulary

Latin	English
epistulam	letter
accipit	receives
tristissimus	very sad
mortua	dead
cūrat	she looks after
equum	horse
plaustrum	cart
parat	prepares
corōnam	wreath
lucernam	lamp
titulum	inscription
sculpit	he carves
ōllam	pot
dēpōnunt	put down
sepulcrum	tomb
pōnit	places
portat	carries
epistula	letter

Key Knowledge

- To translate a Latin story containing subject and object nouns
- To understand the difference between subject and object nouns
- To explore and translate ancient mythology (Pyramus and Thisbe)
- To learn about Roman tombstones
- To recap our prior learning (key vocabulary)

Unit Motto:

**Ex Nihilo Nihil =
(Nothing Comes From
Nothing)**



1 Barites coronam portat.

2 Flavius lucernam portat. Lepidina anulum portat.

3 sculptor titulum splendidum sculpit.

4 After Regina's body has been cremated, her bones are collected and put into a pot; the pot is then put into a pit with other items which Regina may need in the next world.

5 Flavius et Lepidina lucernam et anulum in ollam depōnunt.

6 Barites coronam in sepulcrum pōnit.

Grammar

Nouns change their endings, depending on the job they are doing in the sentence. In Latin, nouns which are the object of a sentence change their endings:



Eg. Candidus epistulam accipit.

epistula (letter) becomes epistulam because it is the object of the sentence.

knowledge Organiser- Repetition in Shapes – Computing – Year 4

Key Vocabulary	Definition
Program	the entire solution to the task, and an implementation of the algorithm as code
Turtle	an arrow or turtle image on screen that draws a line as it is programmed
Command	an instruction given to control a program
Code Snippet	this could be the same as a program; it can have several sets of commands in one program
Algorithm	the part of the design of the program that is precise instructions to be implemented as code
Debug	the process of finding and correcting errors in your code
Decompose	break something down into smaller parts
Procedure	a named code snippet that can be run multiple times.

Key Knowledge:
To identify that accuracy in programming is important
To create a program in a text-based language.
To be able to explain what 'repeat' means
To modify a count-controlled loop to produce a given outcome.
To decompose a task into small steps
To create a program that uses count-controlled loops to produce a given outcome.

Sequencing and Algorithms	Trialling and Debugging
<p>-A sequence is a pattern or process in which one thing follows another.</p> <p>-We design algorithms (sets of instructions for performing a task) to help us program the sequence that we require to achieve our desired outcomes.</p> 	<p>-Programmers do not put their computer programs straight to work. They trial them first to find any errors:</p>  <p>-Sequence errors: An instruction in the sequence is wrong or in the wrong place.</p> <p>-Keying errors: Typing in the wrong code.</p> <p>-Logical errors: Mistakes in plan/thinking.</p> <p>-If your algorithm does not work correctly the first time, remember to debug it.</p>

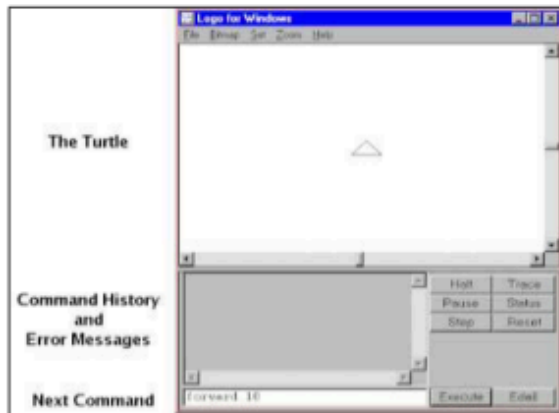
The Basics of FMS Logo

-What is FMS Logo? Logo is a text-based programming language, where we can type commands which are then drawn on the screen.

-Logo helps us to learn how to use programming language, whilst also being creative and using problem-solving skills.



The Display:



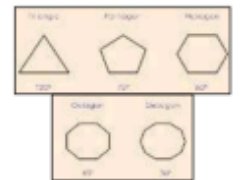
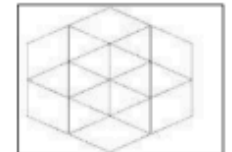
Basic Commands:



- FD:** Forwards. Always followed by a space and the number of steps, e.g. FD 50
- BK:** Backwards. As above, e.g. BK 50
- LT:** Left turn. Always followed by a space and then the degrees to turn, e.g. LT 90
- RT:** Right turn. As above, e.g. RT 90
- CS:** Clears any pen marks on your screen and gets the turtle back to the centre.
- PU:** Stops turtle from leaving a pen trail.
- PD:** Makes turtle leave a pen trail again.

Programming Patterns




- Patterns:** Patterns are things that repeat in a logical way. In everyday life, patterns are everywhere!
 - Patterns in Logo:** Instead of typing in the code to create each individual shape, we can save time by repeating a sequence of instructions. We use the 'repeat' function.
 - Repeat:** Type the command 'repeat' — this repeats commands a set number of times. The number following repeat is the number of times to repeat the code, and the code to be repeated is in square brackets, e.g. repeat 4 [FD 100 LT 90]
- The above code will repeat FD 100 LT 90 four times.
- Creating Shapes and Loops:** To make shapes, we need to know the angles of corners of different shapes (see right). Using the repeat function with shapes can help us to make spirals.



Knowledge Organiser – PE – Dodgeball - Year Four

Key Vocabulary	Definition
Agility	The ability to change direction quickly
Caught Out	When a player catches an opponent's ball deeming them out
Hit Out	When a player in dodgeball is hit below the shoulders by a live ball
Communicate	Share information
Tactic	To make a plan or strategy

Skill Development	
Dodge	<ul style="list-style-type: none"> Stay towards the back of the court. Be aware of your opponents who are holding a ball Get ready to move quickly away from the ball that is being throw Jump, Duck or Dive to avoid being hit out.
Throwing	<ul style="list-style-type: none"> When throwing, you should position yourself close to the line separating the two teams this gives you the best chance of hitting an opposition player. Stand side on whilst pulling your throwing arm back. Outstretch your non-throwing arm towards your target. Push forward with your throwing arm and release the ball while shifting your weight onto your front leg. Tip – Aim to throw the ball towards the lower part of your opponents body as this makes it harder for them to dodge.

Skills	
Dodge	 <p>A player in a purple shirt and brown shorts is shown in a crouched, ready position. A yellow ball is on the floor near their feet, with an upward arrow indicating it is being thrown. The player's arms are outstretched to the sides, and their body is angled to avoid the ball.</p>
Throw	 <p>A player in a pink shirt and black shorts is shown in a side-on stance, ready to throw a green ball. Their right arm is pulled back, and their left arm is extended forward towards the target.</p>
Catch	 <p>A player in a purple shirt and brown shorts is shown from the side, leaning forward with their hands outstretched to catch a yellow ball. The ball is in the air, and an arrow indicates its trajectory towards the player's hands.</p>

R.E. Year 4 Summer 1 Knowledge Organiser

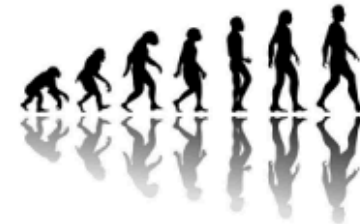
What motivates Humanists to lead good lives?

Key vocabulary	Definition
Humanism	A non-religious worldview that approaches life by learning from their own or other experiences in order to inform their decisions and others.
Choices	Deciding between two or more possibilities and having the freedom to make this choice.
Golden Rule	A belief Humanists live by, to treat others as you would like them to treat you.
Global Warming	Increase in Earth's temperature caused by the carbon dioxide we give off as humans and the things we do.
Evolution	The process by which living things gradually change over time.
Big Bang Theory	The idea that the universe began as just a single point, then expanded and stretched to grow as large as it is now.





Key Knowledge
I can discuss what is a 'good' life.
I know the rules a Humanist might choose to live by to live a 'good' life.
I know what a Humanist might believe about how the world began.
I can discuss what actions a Humanist may take to live a 'good' life.
I can talk about what would motivate me to lead a better life.

Core Knowledge:



Humanists value freedom, empathy, reason, and human rights. Humanists believe there is no evidence of God, and science gives many answers to things previously attributed to Gods. They believe we have one life, and therefore need to make the best of it. This includes treating humans and other living things ethically, fairly, and positively. It is important to also take personal responsibility for our actions and believe that we have the potential to create great things which will benefit humanity and future generations.





Key Vocabulary	Definition
Time signature	The rhythm following a clef
Key signature	The key of a piece of music depends on the flats and sharps in the music.
Minim	
Crotchet	
Dotted crotchet	
Quaver	
Accompaniment	Music composed to support another musician (piano/band)
Dynamics	ff, pp, mp, mf, p, f
Gospel	Traditional Christian music
Orchestral	An ensemble of instruments

Key Signature: C major — there are no sharps or flats in the key signature





How many beats per measure


What note gets one beat

Time Signature: 4/4 — there are four crotchet beats in a bar

Key Signature: G major — there is one sharp in the key signature



Key Signature: B b major — there are two flats in the key signature





Songs covered

- Train is A-Comin'
- Oh happy days
- A world full of sound



Key Vocabulary	Definition
Sculling	Using quick movements of the hands to keep the head above the water. Sculling can be done head or feet first.
Treading Water	A survival technique used to keep the head above the water.
Submerge	The act of going under the water.

Skill development
Swim competently, confidently and proficiently over a distance of at least 25m.
Use a range of strokes effectively (for example, front crawl, backstroke and breaststroke).
Perform safe self-rescue in different water-based situations.

Skills	
Breaststroke legs	
Treading water	
Breathing when swimming	