

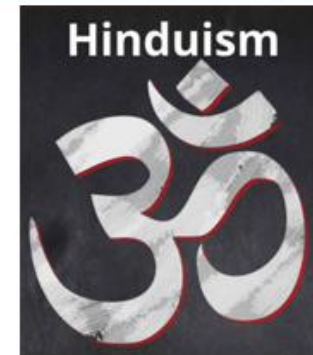
Knowledge Organisers

Summer 1

Art / DT
Computing
Geography
History
Latin
PE
PSHE
Music
RE
Science

Birch

R.E. Year 4/5 Summer 1 Knowledge Organiser
Enquiry: How can Brahman be everywhere and in everything?



Key vocabulary	Definition
Brahman	The ultimate creator God, from which everything comes – he is everywhere and in everything.
Trimurti	The 3 parts of Brahman represented by 3 deities: Brahma, Vishnu and Shiva.
Deity	A God
Ganesha	Hindu god - elephant head for sign of strength, removes obstacles
Lakshmi	Goddess of fortune- part of Brahman
Puja	Worship
Omnipresent	Being everywhere
Aum	Aum is the main symbol of Hinduism. It is the sound heard in deepest meditation and is said to be the name most suited for God
Atman	Refers to a person's 'soul' or 'spirit'. Hindus believe that atman is part of the spirit of Brahman, their ultimate God.

Key Knowledge

I can explain how I can mean different things to different people.

I know that Brahman is the Supreme God but he can take many different forms.

I can explain some of the ways Hindus worship at home.

I know that the Trimurti are the 3 gods which make up Brahman

I know that Brahman is in and part of everything.



Saraswati



Brahma



Hanuman



Shiva



Ganesha



Buddhahood



Vishnu



Kali



Kamadeva



Krishna



Durga



Rama



Parvati



Lakshmi

Knowledge Organiser- Style in Art – Art -Year 4/5

Knowledge Goals

- To understand that style can refer to a technique an artist has used.
- To know that Rococo was a style of art from the 1700s.
- To know that abstract art is art that doesn't try to look like something.
- To understand that artists use colour theory to create an effect in abstract paintings



The Pilgrimage
to the Isle of
Cythera (1717)

Antoine Watteau

modernist style

Marcel Breuer



Wassily Chair (1925-1926)

rococo style

Thomas Chippendale



ribbon-backed chair



Style

KEY VOCABULARY

style

how **a piece of art looks**: style is often divided into the style of a period of time in history, a country, a group of artists, art which is about a particular idea or how an artist creates a work of art

technique

a **way of doing** something, like painting a picture

brushstroke

the mark made by a **paintbrush**

rococo

a light-hearted and pretty style of art and design from the 1700s which uses **elaborate decoration**, curvy lines and light colours

asymmetrical

not symmetrical: different on one side of the design to the other

modernist

a **style of art and design starting in the 1850s** that rejected previous artistic styles, was often abstract, experimental and focussed on materials

abstract

art that **doesn't try to look like something**, but uses shapes, colours, lines and form to achieve an effect

colour theory

information about how to **create different colours by mixing** (e.g. how to mix primary colours to make secondary colours) and the **effect of different colour combinations** (e.g. what happens when you put two complementary colours next to each other)

complementary colours

any **two colours which are opposite** each other on the colour wheel, e.g. yellow and purple are complementary to each other

Contra-
Composition of
Dissonances
XVI
(1925)

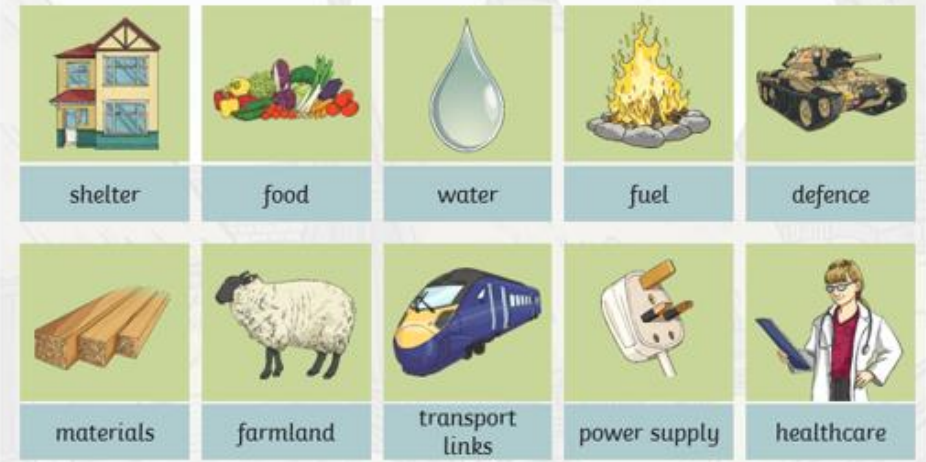
Theo van Doesburg



Knowledge Organiser- The Environment: Enough for Everyone! – Geography -Year 4/5

Key Vocabulary	
settlement	Places where people live and work, and often have a distinct identity.
resources	A source of supply for one's needs
renewable	Using power from things that will never run out – wind, sun
non-renewable	Coal, gas, oil – once they are used/burned they are gone
power station	A place where electricity is produced
import	Goods coming into the country
export	Sending goods to sell in other countries
food miles	The distance food travels to get to your plate
efficiency	Producing something without wasting time, effort, material or money
food security	Having reliable access to enough affordable, nutritious food

What Do Settlers Need?



Knowledge Goals

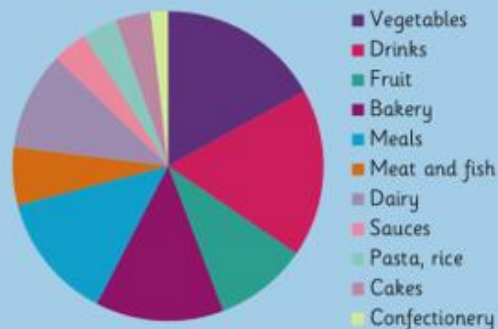
I know the features of a settlement.

I know where the UK gets its power.

I understand what food miles are.

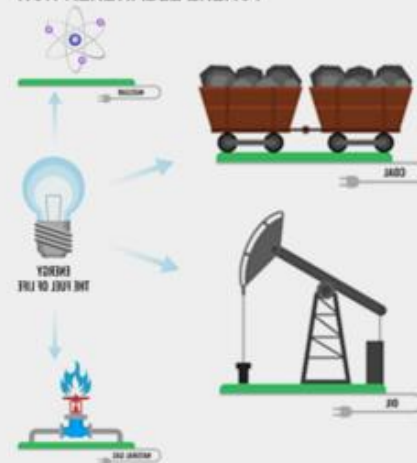
I know how to conserve resources and the small steps we can all take.

**Avoidable Waste per Household
(kg per month)**

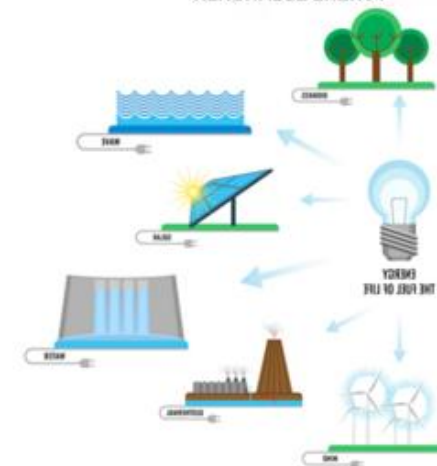


ENERGY SOURCES

NON-RENEWABLE ENERGY



RENEWABLE ENERGY



Knowledge Organiser- Leisure and Entertainment – History -Year 4/5

Key Vocabulary

leisure	Time spent doing something you enjoy.
entertainment	Something used to help people enjoy themselves.
economy	How money is spent and made by people. The economy means the wealth of the country.
golden age	A period of time in which there is lots of prosperity and creativity. It often describes a time when a type of art is at its best.
broadcast	To send information through radio or television.
society	This describes people who live in the same place as each other, defined by their thoughts and interests as a group.
technology	Scientific inventions that aim to make everyday tasks easier.
20th century	The century that came before the one we are in now, which is the 21st century. When historians talk about the 20th century, they are talking about the time period between 1st January 1901 to 31st December 2000.

Knowledge Goals

To know how people spent their free time during the 20th century.

To explore key changes in sport in the last 100 years.

To investigate how music changed people's experience of the 20th century.

To explore how television and film changed throughout history.

Cinema and Television

Cinema experienced a **golden age** in the 20th century. Lots of well-known films were created and many film stars gained recognition. One of the reasons that the **golden age** of cinema ended was the increase in the popularity of television.



Many inventors created **technology** that is used in televisions today.

Television allowed people to experience world events that they could not experience in person. Queen Elizabeth II's coronation (1953) and the Moon landing (1969) were **broadcast** live and were television highlights of the **20th century**.



Gaming

Computer games were invented in the early **20th century** and have become a regular **leisure** activity for children and adults.

The first computer game was invented at a university in 1958. It was called 'Table Tennis for Two'. As computer **technology** improved, smaller sized computers meant more access to games. The arcade game 'Pong' was launched in 1972. In 1989, Nintendo launched Game Boy, one of the first handheld and portable games consoles.

By the end of the century, computer games could also be played on consoles at home, such as PlayStation, as well as on desktop computers.



Life in the 20th Century

During the **20th century**, working conditions became better for many people. The government limited working hours and workers had the right to paid holidays. This meant that people had more spare time to enjoy leisure activities.

The **economy** also grew, meaning that people had more money to spend on buying and doing the things they enjoyed.



Holidays

At the beginning of the **20th century**, seaside holidays were popular.

The 1938 Holidays with Pay Act meant that employees were able to have one week of paid holiday per year. This meant that more people could afford holidays.

In 1936, the first Butlins holiday camp opened in Skegness. Holiday camps were very popular at this time and offered accommodation, food and **entertainment** all in one place.

As air travel became more affordable, holidays in other countries in Europe were becoming more popular.

Sport

In the **20th century**, many people had more **leisure** time than before. This meant that there was more time for sports, such as football.

As well as playing sport, more people could listen to or watch sport at home. The first live radio **broadcast** of a sporting event, a boxing match, was in 1926.

When television became popular a few **decades** later, live sports were an important form of **entertainment**.

The 1966 World Cup Final was watched by 32.3 million people on television.



Music

Technology for listening to music developed quickly during the **20th century**. In the early 20th century, the gramophone was a popular way to listen to music at home. By the 1990s, portable music players were becoming more affordable and people could listen to music wherever they went.

Popular music became an important form of **entertainment** that reflected the mood of **society** at the time.



Knowledge Organiser- Electricity – Science -Year 4/5

Key Vocabulary

appliance	a device or piece of equipment designed to perform a specific task
mains electricity	the form of electrical power that is delivered to homes and businesses through the electrical grid
battery	a container consisting of one or more cells, in which chemical energy is converted into electricity and used as a source of power
device	a thing made or adapted for a particular purpose
circuit	a complete circular path that electricity flows through
conductor	a conductor is an object or type of material that allows the flow of charge (electric current) in one or more directions
insulator	a material in which electric current does not flow freely
switch	A switch is an electrical component that can disconnect or connect the conducting path in an electrical circuit, interrupting the electric current

Knowledge Goals

- To understand that some appliances are mains powered and some are battery powered.
- To know how to make a complete circuit.
- To know materials that are insulators and those that are conductors.
- To know how and why switches are used.

Examples of Electrical Conductors	Examples of Electrical Insulators
 <p>water metal</p>	 <p>wood plastic paper rubber glass fabric</p>

Components (Parts) Vocabulary

cell: Normally, we would call this a **battery** but scientifically, this is a cell. Two or more cells joined together form a **battery**.



wires: Used to connect the different components in the **circuit** together.



bulb: Lights up in a complete **circuit**.



motor: Produces movement in a complete **circuit**.



buzzer: Makes a noise in a complete **circuit**.



switch: Used to turn other components in the **circuit** on or off.



Series Circuit

A **circuit** where the components are connected in a loop.
Electricity flows through each component in a single pathway.



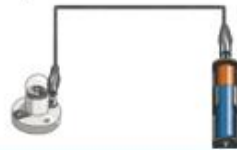
Complete Circuit

Electricity can flow. The components will work.



Incomplete Circuit

There is a break in the **circuit** that prevents the **electricity** from flowing. The components will not work.



Switches can be used to open or close a **circuit**. When off, a switch 'breaks' the **circuit** to stop the flow of **electricity**. When on, a switch 'completes' the **circuit** and allows the **electricity** to flow.





push button switch







slide switch

Appliances



Many everyday **appliances** rely on **electricity** for them to work. Some **appliances** use **mains electricity** (are plugged into a socket) and others have a **battery** to make them work. Examples of **mains-powered appliances** include toasters and televisions. **Battery-powered appliances** can include mobile phones and torches.

mains-powered	battery-powered
	



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♭ major — there are two flats in the key signature



Songs covered




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



Knowledge Organiser – PE – Dodgeball

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	
Throw	
Catch	

Knowledge Organiser- Repetition in Shapes – Computing

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

-A **sequence** is a pattern or process in which one thing follows another.

-We design **algorithms** (sets of instructions for performing a task) to help us program the sequence that we require to achieve our desired outcomes.



-**Programming** is the process of keying in the code recognized by the computer (using your algorithm).

Trialling and Debugging

-Programmers do not put their computer programs straight to work. They **trial** them first to find any errors:



- Sequence errors: An instruction in the sequence is wrong or in the wrong place.
- Keying errors: Typing in the wrong code.
- Logical errors: Mistakes in plan/thinking.

-If your algorithm does not work correctly the first time, remember to **debug** it.

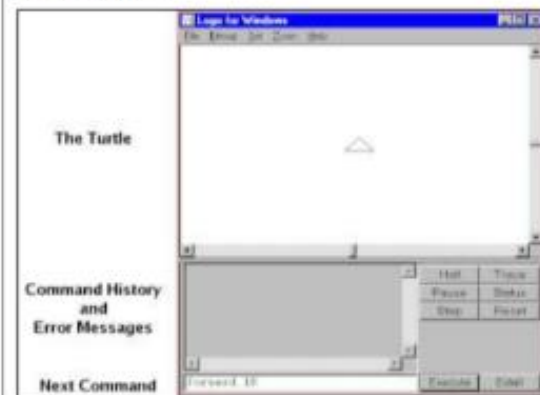
The Basics of FMS Logo

-**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:



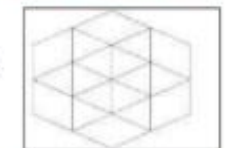
- FD:** Forwards. Always followed by a space and the number of steps, e.g. FD 50
- BK:** Backwards. As above, e.g. BK 50
- LT:** Left turn. Always followed by a space and then the degrees to turn, e.g. LT 90
- RT:** Right turn. As above, e.g. RT 90
- CS:** Clears any pen marks on your screen and gets 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!

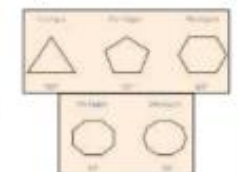


-**Patterns in Logo:** Instead of typing in the code to create each individual shape, we can save time by repeating a sequence of instructions. We use the 'repeat' function.



-**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 – PSHE – Relationships



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...

Can you share a solution that might help a person manage a personal loss?

How do friendships change? How do we manage falling out with friends?

What are your opinions on being a vegetarian?

Latin Knowledge Organiser - Unit 5: Romans and Britons

Key Vocabulary

Latin	English
ludunt	They play
sedent	They sit
equitāmus	They ride
colimus	They farm
pugnamus	They fight
ferōciter	fiercely
dīligerter	carefully
celeriter	quickly
et	and
tesserae	mosaics
ita vērō	yes
dīrēctae	straight
commodae	comfortable
nōbīscum	with us
viae	roads
villae	houses

Key Knowledge

- To recap prior learning of masculine and feminine verb endings.
- To translate simple sentences with verbs and adverbs.
- To complete sentences by selecting the appropriate adverb.
- To translate sentences with simple plural forms.
- To compare and contrast traditional tales from different cultures.

Grammar

Words we use to talk about actions are called verbs, e.g. Candidus **is fighting**.

Words we use to add more information to a verb are called 'adverbs'. For example, celeriter equito - I ride quickly.

Adverbs in Latin often (but not always) end in -er.

UnitMotto

non dūcor dūcō = I am not led, I lead



Britons are best!

Rufus, Flavia and Candidus are kicking a ball. They sit down for a rest and begin to talk...

