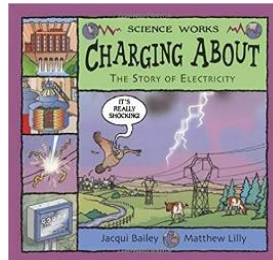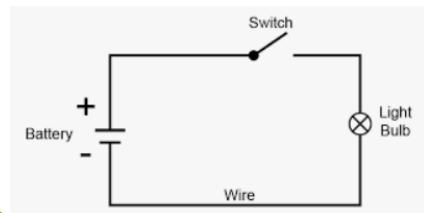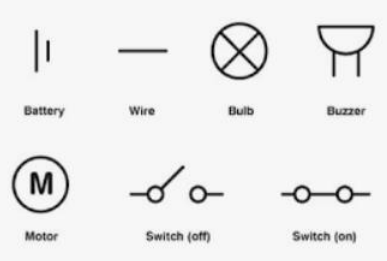| What do I need to know from previous topics ? |
|---|
| **Identify** common **appliance**s that **run on electricity.** |

What will I need to know for future learning?
Electricity can only **flow** around a **complete circuit** that has no gaps. There **must** be **wire**s **connected** to both the **positive** and **negative** end of the power supply/**battery.**
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.
A **conductor** of electricity is a material that **will allow electricity to flow** through it. Metals are good conductors.
An insulator does not allow electricity to flow through them. Wood, plastic and glass are good insulators.

Key Vocabulary	Definition
appliance	A **machine** in your home that you use to do a **job** such as **cleaning or cooking**.
cell	**Part** of a **battery**
circuit diagram	**Electrical components** shown in a **picture** by using standard symbols.
conductor	Materials which **allow electricity to flow through** them with ease.
insulator	Materials that **do not allow electricity to pass through** them with ease.
parallel circuit	A **circuit** with **two or more pathways** for the current to flow through.
series circuit	A **looped circuit** where the electricity flows from the positive to the negative terminal of the battery.
switch	A **device for making and breaking** the **connection** in an electrical circuit.

Battery   Wire   Bulb   Buzzer

Motor   Switch (off)   Switch (on)

Switch

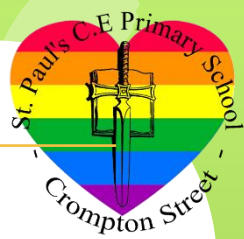Battery   Light Bulb

Wire

Super Scientist

Maria Telkes
1900 – 1995

Maria is a famous scientist who made lots of discoveries around solar power. She is best known for creating the first house built with a heating system that ran completely on solar energy.

SCIENCE WORKS
CHARGING ABOUT
THE STORY OF ELECTRICITY

IT'S REALLY SHOCKING!

Jacqui Bailey   Matthew Lilly

What do I need to know from previous topics?

A **map** is a specially drawn picture of a place from above.	There are different types of housing in our local area, such as **detached**, **semi-detached**, **terraced**, **bungalow** and **flats**.

What will I need to remember for future learning?

Four-figure grid references are used to locate a particular grid square on a map. We use the **eastings** (horizontal number) first and then the **northings**.	**Maps** use **symbols** to identify places of interest.
Settlements are places that become communities for people to live. People choose to settle in an area if it meets their needs.	Throughout history, **Romans**, **Anglo-Saxons** and **Vikings** all settled in Britain and established some of the towns we live in today.

Maps and **aerial photographs** can show us how the land is used in an area. In our local area, the land is mostly used for **housing**.

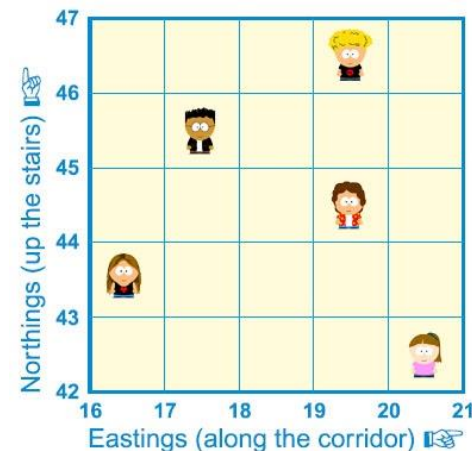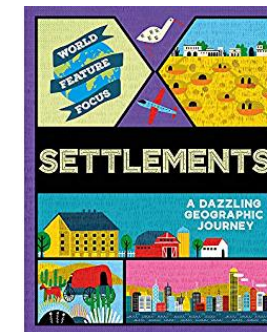| Key Vocabulary	Definition
land use	how the land in a settlement is used by humans
four-figure grid reference	used to locate a particular grid square on a map. We use the eastings (horizontal number) first and then the northings
retail	selling goods to the public
leisure	use of free time for enjoyment
housing	houses or flats where people can live
industrial	production and manufacturing, for example factories and businesses that make products
agricultural	farming, growing soil, crops or rearing animals

<u>Key Landmarks</u>
Walkden Town Centre

<u>Key Text</u>

What do I need to know from previous topics?

Children and adults are baptised in the name of the **Father**, the **Son** and the **Holy Spirit** which is the **Trinity**.

Dharma is what is expected of a **Hindu** person. It is the 'right way of living'.

What will I need to remember for future learning?

Christian ceremonies include **baptism** and **confirmation**.

Hindu ceremonies include the '**Sacred Thread Ceremony**'.

Jewish ceremonies include **Bar/Bat Mitzvah**.

Some people will hold a non-religious '**Naming Day**' for their child.

All religions and many non-religious people will celebrate **marriage** with a wedding ceremony.

Key Vocabulary	Definition
Baptism	Water is poured on the head or the person goes under the water to show their belief in Jesus.
Confirmation	A sign that a Christian is old enough to take responsibility for their own faith.
Sacred Thread Ceremony	A Hindu ceremony to show that they are old enough to take on religious responsibility.
Bar/Bat Mitzvah	A ceremony to mark the time when a boy or girl becomes a Jewish adult.
Naming day	An opportunity for non-religious people to mark the arrival of a new child.

Art Year 4 Summer: Andy Goldsworthy- Land Art (Drawing, Collage and Sculpture)

What do I need to know from previous topics?

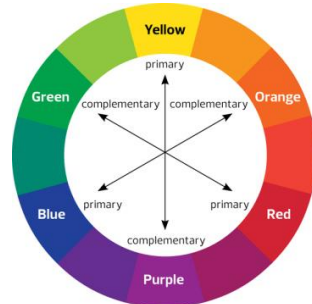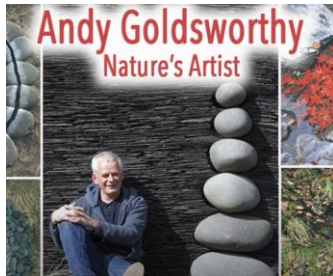|	
Many **artists** are **inspired** by **nature** and we can see this influence in their artwork.	When creating a **3D drawing**, we need to **consider** the effect of the **light**.
Observational drawing can include drawing something directly **in front of you**, **around you** or copying from an **existing image**.	**Transient art** is a term used for any creative work that **does not stay fixed in its position.**

What will I need to remember for future learning?

Land Art has often been made in **remote** and **rural areas** far from urban populations, and sometimes from **materials** that **disappear over time**.	**Artists** may choose to **photograph** their **work** to see how it changes over time.

Key texts
Andy Goldsworthy- Nature's Artist

Key artists and artwork
Andy Goldsworthy- Taking a Wall for a Walk

Andy Goldsworthy- Rowan Leaves and Hole

Key Vocabulary	Definition
Land art	art that is **made directly in the landscape**, sculpting the land itself or making structures in the landscape using natural materials
natural	**existing in nature**, not made my humans
rural	a **countryside area**, outside of towns and cities
decay	the process of **rotting** or **decomposing**
acrylic	a **fast-drying, strong paint**

What will I know by the end of the unit?

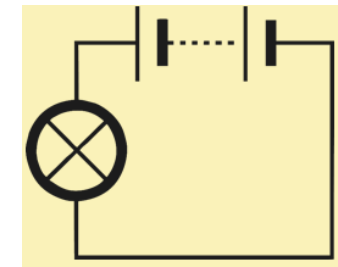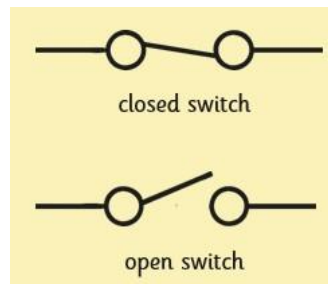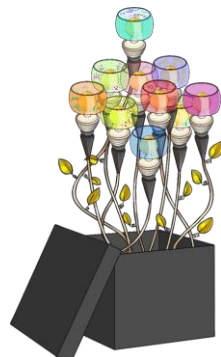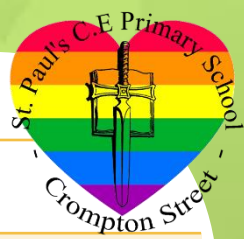|	
In the **Victorian** period, **Thomas Edison** invented the '**modern light bulb**' that worked for a long time. His invention meant that people could use electricity to light their homes.	The **Anglepoise lamp** is a balanced- arm lamp designed in 1932 by British **designer George Carwardine.**
Electrical currents need a path on which to **travel**. Another name for this path is a circuit.	**Electricity flows** from the **power** source, **in a loop** or **circuit**, back to the power source.
A **switch** is used to **make or break a complete circuit.**	If there is a **fault** in a **series circuit**, the other **components will stop** working. With **a parallel circuit**, if there is a **fault** in one component, the other **continues to function**.

Key Vocabulary	Definition
battery	A **device** that **can make electricity,** with the reaction of certain chemicals.
conductor	Substances that an electrical **charge can pass through** without difficulty.
insulator	A material that is a **poor conductor of electricity.**
circuit	A **complete path** around which electricity can flow.
series	A **single pathway** through which electricity can flow.
parallel	A **parallel circuit** contains **multiple pathways** or branches.

Key diagrams

closed switch

open switch

Computing Year 4 – Summer 2: Artificial intelligence and Micro:bit

What will I know by the end of the unit?

Artificial intelligence is having an impact already in day-to-day life.

Artificial intelligence can **assist** and **benefit** us in our everyday life.

Artificial intelligence is already being used to **create music** and **art**.

The **potential** of artificial intelligence is **limitless**.

A **Micro:bit** is a pocket-sized computer that is a **physical device**. It has an **interactive system**, so it can be **programmed** to respond to (**sense, measure** or **log**) the world around it.

Sensor inputs from an **accelerometer** can be used to **detect movement** in conjunction with the use of **variables**.

Inputs, outputs and **computer code** work together to make **control systems**.

Logic is used to make different **outputs** happen depending on changes in **data** from a **sensor**

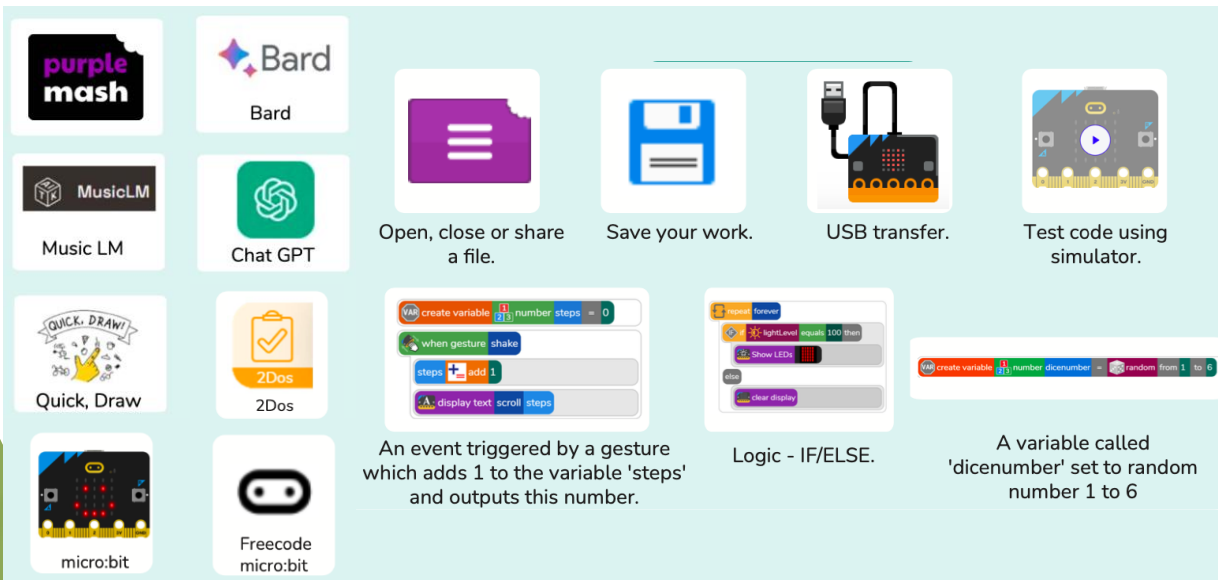| Key Vocabulary	Definition
algorithm	A precise, step-by-step set of instructions used to solve a problem or achieve an objective.
artificial intelligence	Computer systems able to perform tasks normally requiring human intelligence, such as seeing things, speech recognition, decision-making, and translation between languages.
data	A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
accelerometer	A sensor that detects movement.
light sensor	An input that sense the level of light in the world.
simulation	A program that models a real-life situation. They let you try things out that would be too difficult or dangerous to do in real life.
logic	How computers make decisions based on whether things are true or false.
gesture	A type of input where the micro:bit is moved in different ways such as tilting, dropping, shaking.
variable	A named area in computer memory. A variable has a name and a value. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.

purple mash

Bard

Music LM

Chat GPT

Open, close or share a file.

Save your work.

USB transfer.

Test code using simulator.

Quick, Draw

2Dos

An event triggered by a gesture which adds 1 to the variable 'steps' and outputs this number.

Logic - IF/ELSE.

A variable called 'dicenumber' set to random number 1 to 6

micro:bit

Freecode micro:bit

Key Vocabulary

English	French
by aeroplane	en avion
by train	en train
by car	en voiture
by boat	en bateau
by bike	en vélo
by taxi	en taxi
France	en France
Spain	en Espagne
Turkey	en Turquie
Greece	en Grèce
Poland	en Pologne
Bulgaria	en Bulgarie
Ireland	en Irlande
Portugal	en Portugal
Wales	en Maroc
I go to	Je vais en/au…
Where are you going (on holiday)?/ Where do you go (on holiday)?	Où vas-tu (en vacances)?
How do you travel to …?	Comment vas-tu en/au….?
I go by…	Je vais en…
True	Vrai
False	Faux

What will I know by the end of the unit?

- How to use a bilingual dictionary
- How to say where I go on holiday and how I get there
- How to identify key information from a spoken passage
- How to express my opinion in writing

le train

l'avion

le bateau

le bus