

# Year 3

## Knowledge Organisers



At South Hill, we have created 'Knowledge Organisers' to help pupils and parents to know what the children will be learning in each of our Foundation subjects. These contain essential vocabulary and facts for each topic.

Please see 'Knowledge Organisers' attached for Year 4 for the autumn term, which will also be in pupil's books and on working walls in school.

**YEAR 3 ART – VENETIAN MASKS – 3D/ TEXTURE KNOWLEDGE ORGANISER**

**What have we learnt before in Art and what will we learn next?**

In Year 1, we learnt about primary and secondary colour when we looked at the artist Van Gogh. We also practised using two different grades of pencil. We also looked at George Orwell and practised our painting skills.

In Year 2, we practised our painting and creating tone in our work on self-portraits inspired by Andy Warhol.

In Year 3, we will be working on our drawing, sketching and painting skills in our unit on Venetian masks.

In Year 4, in our drawing and painting topic, we will further develop our artistic skills to show facial expressions and body language. We will use marks and lines to create texture and reflection, as well as learning to mix our own colours (including skin tones).

In Year 5, we will extend this to sketching our own imaginary eye to show mood and feeling, as well as studying the artist, looking and developing our ability to paint landscape and reflections.

**VENETIAN MASKS**

The Venice Carnival is a celebration of victory of the Republic of Venice over its enemy. It happens every year and it lasts about 10 days.

It is full of fun and cheekiness. It allows people to take on the persona of different characters as represented by their masks. It gives people the chance to misbehave. It also, originally, allowed people of all social classes a chance to mingle without fear of getting into trouble. During earlier centuries mask wearing for disguise was common place and it has strong links to theatre.

Masks were traditionally made out of leather or paper mache. Today, some are still one but also now masks are made from glass, acrylic, plaster called 'gesso', fibre metal and ceramic, not designed to be worn.

**HISTORY OF MASKS – THEATRE**

The most origins from ancient Greece which was from the similar to pantomime. They would be performed in market squares to entertain the crowds and would be largely improvised. There was a stock of characters which crowds would expect to see and the presence of the masks would make these instantly recognizable to the public. The longer the nose, the stier the character.

**Key Vocabulary**

Venetian, Masks, Theatre, Papier Mache, Carnival, Celebration, Commedia Del Arte, Characters

Observational drawings, Shading, Tone, Shadow, Texture, Colour, Pattern, Mood board

**DRAWING/ SKETCHING**

Conducting observational drawings are an excellent way to start a topic. This allows you to draw inspiration from existing art in order to create your own. You can use pencils in different ways to create tone and shadows during your study. This can make the sketch appear 3D.

Shading with pencil:

- outline
- hatching
- cross-hatching
- stippling
- back and forth stroke
- scumbling

You can also use different grades of pencil to create more shade.

**MAKING A PAPIER MACHE BASE**

**DECORATING MASKS**

Venetian masks have a range of different:

- patterns
- colours
- textures
- additions - ie, feathers, ribbons

The aim of the Venetian mask worn at the Venice Carnival are to be as elaborate and eye-catching as possible. Consider what you would add to a Venetian mask to ensure it stands out from the crowd.

**YEAR 3 DT – WHAT WOULD IT BE LIKE TO BE A MONARCH? KNOWLEDGE ORGANISER**

**History of Greek Parties**

In Year 1, we looked at the Greek Olympic Games. We have been an important part of Britain since 1912. People have been celebrating the Olympic Games in Britain since 1908. The Olympic Games in Britain were held in 1908, 1948, 1972, 1980, 1984, 1988, 1992, 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2024. The Olympic Games in Britain were held in 1908, 1948, 1972, 1980, 1984, 1988, 1992, 1996, 2000, 2004, 2008, 2012, 2016, 2020, 2024.

**Celebration Flags**

Celebration flags are an important part of our street parties. They are usually big and show up to celebrate and show national pride to Britain to show they are proud to be British. They are usually made up of Union Jacks and other national flags. They are usually made up of Union Jacks and other national flags. They are usually made up of Union Jacks and other national flags.

**Afternoon Tea**

Afternoon tea has been associated with the British family for a very long time. It is a special time of day when people relax and enjoy a traditional afternoon tea. There are many different types of afternoon tea and it is a popular favourite in this unit. We will be studying what they have in them and how they look to ensure they have had the same of excitement and pride at Britain as such an important event. There are some recipes to create you.

**The Latest Serving Queen and a New King**

Queen Elizabeth II was born on 21<sup>st</sup> April 1926. She became Queen on 2<sup>nd</sup> June 1952. She is the longest reigning monarch ever in Britain.

King Charles III was born on 29<sup>th</sup> November 1948. He became King on 8<sup>th</sup> September 2022 and his coronation was on 2<sup>nd</sup> June 2023.

**Key Vocabulary**

Royal Family, King Charles III, Monarchy, Platinum Jubilee Celebration, Afternoon Tea, Coronation, Afternoon Tea, Coronation, Union Jack Flag, Tea, Sausages, Cream Tea, Great Britain, Cake



## YEAR 3 DT – WHAT WOULD IT BE LIKE TO BE MONARCH? KNOWLEDGE ORGANISER

What have we learned before in DT and what we will learn next?

In Year 1, in textiles we made Victorian sock puppets. In cooking and nutrition, we made ship's biscuits.

In Year 2, in cooking and nutrition, we made fruit and vegetable lanterns. In textiles, we made a class picnic mat.

In Year 3 we will learn in our topic 'What would it be like to be monarch?' to make a flag and afternoon tea for our street party celebration.

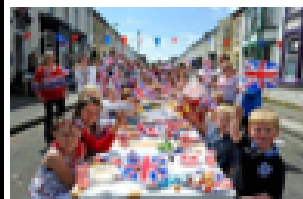
In Year 4, we will develop our sewing skills by making bunting.

In Year 5, in food and nutrition we will make Viking bread. In textiles we will make a South American bag.

### History of Street Parties

Street parties, organised by communities on most across the UK have been an important part of British culture since 1919. 'Peace Tolls' were held after World War I as a treat mainly for children in those times of hardship. Since then they have been used to mark important events in British history such as VE day (the end of World War II) and celebrating important anniversaries of the British Royal family such as birthdays, weddings, coronations and jubilees.

2022 marked the platinum jubilee of Queen Elizabeth II (our Queen) which means she had been Queen for 70 years – the longest reign in British history. Street parties were held all over Britain to celebrate this special occasion. King Charles has asked the country to support their communities as a way of celebrating his coronation.



### Celebration Flags

Celebration flags are an important feature of British street parties. There are usually big ones strung up as decorations and small hand held ones for children to wave and they are always Union Jack flags as these ~~celebrate~~ **celebrate** the joining of four nations (England, Wales, Scotland and Northern Ireland) which make up Great Britain. We will be making our own celebration flags to wave at our street party.

**cutting** our cutting and sewing skills.



### The Longest Serving Queen and a New King



Queen Elizabeth II was born on 21<sup>st</sup> April 1926.

She became Queen on 2<sup>nd</sup> June 1953.

She is the longest reigning monarch ever in Britain.

She died on 8<sup>th</sup> September 2022.

King Charles III was born on 14<sup>th</sup> November 1948, he was Queen Elizabeth II eldest son.

He became King on 8<sup>th</sup> September 2022 and his coronation was on 6<sup>th</sup> May 2023.

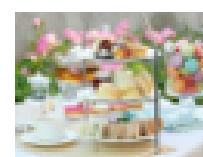
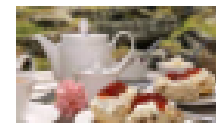


### Afternoon tea

Afternoon teas have been associated with the Royal family for a very long time. At street parties, the food which will often be served includes that of a traditional afternoon tea including finger sandwiches, cakes, scones (with cream and jam), biscuits and other little cakes. These sometimes have a British theme in their colours and decorations e.g. be decorated in either blue, white or red. A particular favourite sandwich of the Queen's was allegedly cucumber sandwiches!

In this unit, we will be selecting a type of food in small groups to produce for our class street party. We will be designing what they have in them and how they look to ensure they help build the sense of excitement and pride of Britain at such an important event.

Here are some pictures to inspire you:



### Key Vocabulary

Royal family	Queen Elizabeth II	Platinum Jubilee	Street party	Afternoon tea	Union Jack flags	Sandwiches	Cream tea	Cake	
King Charles III	Monarchy	Celebration	Sewing	Cutting	Coronation	Tea	Decorations	Reign	Great Britain

## YEAR 3 ART – VENETIAN MASKS – 3D/ TEXTURE

## KNOWLEDGE ORGANISER



What have we learnt before in Art and what we will learn next?

In Year 1, we learnt about primary and secondary colours when we looked at the artist Van Gogh. We also practised using two different grades of pencil. We also looked at Georgia O'Keefe and practised our painting skills.

In Year 2, we practised our painting and creating tone in our work on self-portraits inspired by Andy Warhol.

In Year 3, we will be working on our drawing, sketching and painting skills in our unit on Venetian masks.

In Year 4, in our drawing and painting topic, we will further develop our sketching skills to show facial expressions and body language. We will use marks and lines to create texture and reflections, as well as learning to mix our own colours (including skin tones).

In Year 5, we will extend this to sketching our own 'Dragon's eye' to show mood and feeling, as well as studying the artist 'Hockney' and developing our ability to paint landscapes and reflections.

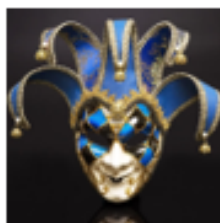
### VENETIAN MASKS

The Venice Carnival is a celebration of victory of the Republic of Venice over its enemy. It happens every year and it lasts about 10 days.



It is full of fun and cheekiness. It allows people to take on the persona of different characters as represented by their masks. It gives people the chance to misbehave. It also, originally, allowed people of all social classes a chance to mingle without fear of getting into trouble. During earlier centuries mask wearing for disguise was common place and it has strong links to theatre.

Masks were traditionally made out of leather or **papier mache**. Today, some still are but also now masks are made from **papier mache** plaster called **Tecopor**, filigree metal and ceramic (not designed to be worn).



### HISTORY OF MASKS – THEATRE

The masks originate from Commedia del Arte which was Italian Theatre similar to pantomime. They would be performed in market squares to entertain the crowds and would be largely improvised. There was a stock of characters which crowds would expect to see and the presence of the masks would make these instantly recognisable to the public. The longer the nose, the sillier the character.



### Key Vocabulary

Venetian

Masks

Theatre

Papier Mache

Carnival

Celebration

Commedia Del Arte

Characters

Observational drawings

Shading

Tone

Shadows

Texture

Colour

Pattern

Mood board

### DRAWING/ SKETCHING

Conducting observational drawings are an excellent way to start a topic. This allows you to draw inspiration from existing art in order to create your own. You can use pencils in different ways to create tone and shadows during your study. This can make the sketch appear 3D.

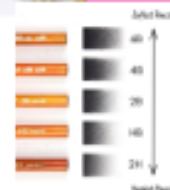


This is where you would need to draw the other side of the mask

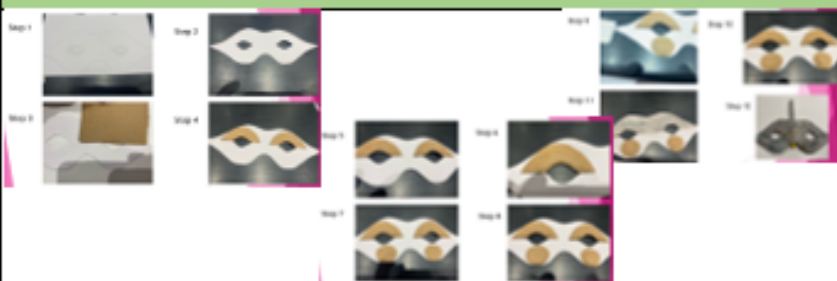
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- outline
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- stippling
- back and forth stroke
- scumbling

You can also use different grades of pencil to create more shade.



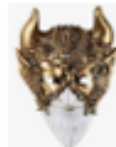
### MAKING A PAPIER MACHÉ BASE



### DECORATING MASKS

Venetian masks have a range of different:

- patterns
- colours
- textures
- additons - i.e. feathers, ribbons



The aim of the Venetian masks worn at the Venice Carnival are to be as elaborate and eye-catching as possible. Consider what you would add to a Venetian mask to ensure it stands out from the crowd.

## YEAR 3 HISTORY — WHAT WOULD IT BE LIKE TO BE QUEEN OR KING?

### KNOWLEDGE ORGANISER



What have we learnt in this topic before and what we will learn this year?

In Year 1 we looked at the Victorians and life under the British Queen Victoria. In Year 1 and 2 we talk about the Queen as a significant person in history.

In Year 3 we used the Queen as a reference point on our timeline of modern day to the Stone Age. In Spring term we look at the British monarchy in relation to invasions by Anglo-Saxons, Romans, Vikings and Normans. In the Summer term we learn about the life Of Queen Elizabeth II and how she has been celebrated by the British public.

In Year 6 we will look at World War II and the role Queen Elizabeth II took on during that period.

### The Queen's Coronation

The Queen's Coronation was on the 2<sup>nd</sup> June 1953 and was held at Westminster Abbey (the setting of every coronation since 1066). She was the 39<sup>th</sup> Sovereign to be crowned there. She had officially succeeded to the throne on 6<sup>th</sup> February, 1952 after the death of her father King George VI.



The Queen and The Duke of Edinburgh were driven from Buckingham Palace to Westminster Abbey in the Gold State Coach – pulled by eight grey gelding horses: Cunningham, Tovey, Noah, Tedder, Eisenhower, Snow White, Tipperary and McCreary.

The Duke of Edinburgh wore full-dress Naval uniform for the journey to and from the Abbey and wore a coronet and his duke's robe over his uniform during the ceremony. The Queen's Coronation dress, designed by British Fashion designer Norman Hartnell, was made of white satin and embroidered with the emblems of the United Kingdom and the Commonwealth in gold and silver thread.



The service began at 11.15 and lasted almost 3 hours. It was conducted by the Archbishop of Canterbury.

### Coronation and Jubilee Celebrations

In 1953, TV cameras were allowed into a coronation for the first time so many families bought TV sets especially for the occasion and watched at home. 27 million people watched it on TV and 11 million on the radio. It was a breakthrough in the history of broadcasting and was shown all over the world.



People gathered in the streets where they lived and threw massive street parties with lots of decorations and food. They would have eaten 'afternoon tea' style food which consists of cakes and sandwiches.

Music would have been played and they would have done lots of dancing.



### The Timeline



### Fun Facts about the Queen

She had nine thrones; six at Buckingham Palace!

In 1954, she became the first serving monarch to circumnavigate the globe on a six month round-the-world tour with her husband.

For her 6<sup>th</sup> birthday, she was given a miniature Welsh cottage.

She 'sat' for her portrait to be painted over 130 times!

She was the first, and so far the only, female member of the Royal Family to serve in the armed forces.

Corgis were her favourite dogs. She owned more than 30 of them during her reign. She also liked Dorgis – a cross between a Corgi and a Dachshund.

She was 5'4" (160cm) tall.

She sent cards to congratulate people when they reached the age of 100.

#### Key Vocabulary

Queen Elizabeth II    King George VI    Coronation    Platinum Jubilee    Westminster Abbey    Sovereign    The Duke of Edinburgh  
 Buckingham Palace    Archbishop of Canterbury    Street Parties    Afternoon Tea    Decorations    Reigning Monarch

## YEAR 3 GEOGRAPHY – PLACE STUDY - VENICE

## KNOWLEDGE ORGANISER



What have we learnt before in Geography and what we will learn next?

In Year 1, we learnt to locate the UK on a map. We also learnt which countries make up the UK.

In Year 2, we learnt a bit more about life in the UK and compared this with a non-European country (Canada). We also looked at World Maps to locate the continents and oceans of the world.

In Year 4, we will learn about where different people in our class are from and we will locate these on a world map.

In Year 5, we will do a topic on contrasting the localities of South America and the UK. We will also locate major rivers on a world map.

In Year 6, we will do a place - based topic on Africa.

### Human/ Physical Features of Venice



Venice is a city in North East Italy. The population of the 'Comune di Venezia', which is Venice, its lagoon and its mainland is 271,367. Area is 412 km<sup>2</sup>. The population of Venice itself keeps on shrinking at an alarming rate and is now under 55000 locals.



The city is unique as it built on 118 small islands that are separated by 150 canals. People cross the canals by many small bridges. They can also navigate across the city on boats, both rowing boats and motor boats. The most famous Venetian type of boat called a gondolas.



There are several problems in Venice. Every year the city sinks a few millimeters because the ground is made from mud. Eventually, the city might be completely underwater, but that would take decades. Because of this, the Italian government is building the MOSE Project, a state-of-the-art defense against the sea-water flooding, that will safely protect Venice indefinitely.

### Why is Venice a popular holiday destination?

The buildings in Venice are very old and attractive, and tourists come from all over the world to see them and the canals. This has made Venice one of the most famous cities in the world.



The most famous sights are the Rialto Bridge, St Mark's Basilica and the Doge's Palace. Its lifestyle and culture are unique in the world. There are several ways to get around in Venice. The most common is walking and using the vaporetto, which is a waterbus which carries lots of people around the city. To access the smaller canals, tourists use a gondolas.

Venice benefits from the beautiful Mediterranean climate. Usually, the warmest month (and therefore the most popular with tourists is July as it is warm and sunny.



Venice has incredible crafts, culture, and tradition. Shopping for handmade goods such as masks, Murano glass jewels, etc. is a must.

### How are the lives of people who live in Venice different from ours?

Similarities	Differences
<ul style="list-style-type: none"> <li>The children go to school like us</li> <li>Adults go to work</li> <li>People live in houses/ flats and apartments</li> <li>Restaurants</li> <li>Shops</li> </ul>	<ul style="list-style-type: none"> <li>Speak Italian</li> <li>Public transport includes boats</li> <li>Much warmer climate</li> <li>Buildings are very old and attractive</li> <li>Venice is surrounded by water</li> <li>Venice is a famous city with many landmarks</li> <li>Venice is a tourist hotspot</li> </ul>

### How would we get to Venice?

The easiest way for us to get to Venice would be to fly from any of the London airports to Marco Polo by aeroplane. This is the closest airport to Venice. The journey would take around 2 hours.



It is also possible to get the train. This would involve getting on the Eurostar but there are no direct routes so it would require a few transfers. This journey would take around 13 hours in total.

### Other popular European countries and capital cities:



Madrid (Spain)



London (England)



Milan (France)



Copenhagen (Denmark)



Paris (France)



Vienna (Austria)



Rome (Italy)

### Key Vocabulary

- Venice
- North East Italy
- Islands
- Canals
- Bridges
- Gondolas
- Mose Project
- European Countries
- Capital Cities
- Madrid
- London
- Milan
- Copenhagen
- Paris
- Vienna
- Rome
- Landmarks
- Tourists
- Mediterranean
- Climate

## YEAR 3 SCIENCE – PLANTS

## KNOWLEDGE ORGANISER



**What have we learnt in this topic before, what we will learn this year and what will we learn next?**

In Year 1 and 2, we learnt in our topic:

- Plants (Wild and Garden)
- To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.
- To identify and describe the basic structure of a variety of common flowering plants, including trees.
- Plants (Parts of a plant and growth)
- Observe and describe how plants need water, light and a suitable temperature to grow and stay healthy.
- Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

In Year 3, we will learn:

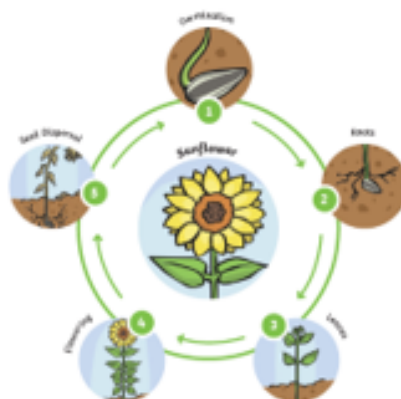
- How to identify and describe the functions of different parts of a flowering plant; roots, stem/trunk, leaves and flowers.
- To explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.
- To investigate the way in which water is transported with in plants.
- To explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

In Year 4, we learn:

- To recognise that living things can be grouped in a variety of ways
- To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.

### Life Cycle of a Flowering Plant

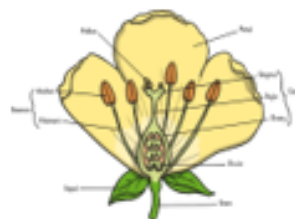
#### The Flowering Plant Life Cycle



### PARTS OF A FLOWER AND THEIR JOBS

We will be able to label the parts of a flowering plant and their role in pollination

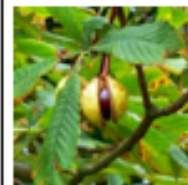
Pollination occurs when pollen from the anther transfers to the stigma.  
When an insect goes into the flower to drink the nectar, some grains of pollen brush off the anthers onto their body. The pollen on the stigma then travels down the style towards the ovary.  
Once it reaches the ovary, the pollen joins with an ovule. The ovule can then grow into a seed. This is called fertilisation.



### SEED DISPERSAL

Seeds are dispersed by:

- Water- coconuts in the sea
- Dropping- conkers falling off a tree
- Carrying- teasels sticking to animals fur
- Shaking- dandelions in the wind
- Eating- birds eating fruit then pooping seeds out
- Bursting- Poppy seeds.



### FOCUS SCIENTIST – Agnes Arber - Botanist



Agnes Arber was born in London in 1879. She studied plants (botany) and the philosophy of biology. She was the first female botanist to be elected as a Fellow of the Royal Society and to receive the Gold medal of the Linnean Society. She focused on flowering plants and most of her studies took place at University College, London. She lived to the age of 81 years old.

### What does a plant need to grow?

Different plants vary in how much of things they need.

#### What a Plant Needs



### Parts of a flowering plant

Roots grow underneath a plant, below the surface of the soil. The roots anchor the plant in the ground, and absorb nutrients.

The leaves make food for the plant using sunlight and carbon dioxide from the air.

The stem or trunk holds the plant up.

Flowers are brightly coloured to attract insects and birds. Flowers use the pollen to make seeds to grow new plants.



### Key Vocabulary

Fertilisation, Petal, Stamen, Carpel, sepal, Pollination, pollinator, germination, seed dispersal, roots, stem, leaves, Flowers, Nutrients, Evaporation.



### What have we learnt in this topic before and what we will learn this year?

In Reception, we learnt about Light in our topic: 'Festivals and Celebrations'.

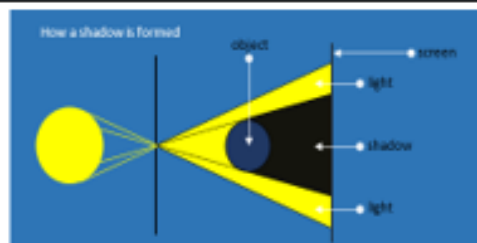
In Year 3, we will learn in our topic: Light (Shadows and reflection) to:

- recognise that they need light in order to see things and that dark is the absence of light
- notice that light is reflected from surfaces
- recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- recognise that shadows are formed when the light from a light source is blocked by a solid object
- find patterns in the way that the size of shadows **change**

In Year 6, we will learn in our topic: Light (How light travels) to:

- **explain** that light appears to travel in straight lines
- use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

### HOW ARE SHADOWS FORMED?



- **Shadows** are formed when the light from a light source is **blocked** by an opaque object.
- **Opaque** objects do not let light pass through them.
- **Transparent** objects let light pass through and give a clear view of objects on the other side.
- **Translucent** objects are not transparent but clear enough to let some light through.
- When an **object is closer** to the **light source** and **further** from the surface, the **shadow is bigger**.
- When an **object is further** from the **light source** and **closer** to the surface, the **shadow is smaller**.
- The **silhouette** (outline) of the shadow will change depending on the **angle** of the light source.

### FOCUS SCIENTIST - ALHAZEN

Alhazen was an Arabian physicist, mathematician, and astronomer whose most significant contribution was his study in vision that is still used in modern times. He was also called the **Father of Optics** and "The First True Scientist" for pioneering the modern scientific method. He declared that it is **not our eyes that emit light**, and conducted experiments to prove that light was reflected from the object of vision into the eye- this was something that other scientists had said was not the case. Because of Scientists like Alhazen, we now understand how our eyes work. **We see** when light hits an object it is reflected (bounces back) and enters our eyes.



<https://www.bbc.com/news/health-16-06-2016>

### Key Vocabulary

translucent transparent opaque light source shadow sun reflection blocked straight lines man-made natural damage direction

### LIGHT SOURCE



Dark is the absence of light. A light source produces light and can be natural or man-made.

Some animals, such as fireflies and glow-worms, are light sources. They make their own light to attract mates.

Man made	Natural
Headlights	Sun
Phones	Stars
Torches	Lightning
Lightbulbs	Fire
Computer screens	Lava

### SUN SAFETY

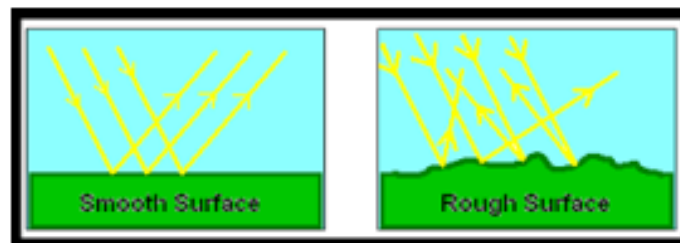


- The **light** from the **sun** can be **dangerous**.
- It can **damage** our eyes.
- We must **never look directly** at the sun.
- We can **protect** our eyes by wearing sunglasses or sunhats in bright sunlight.

### REFLECTION

When light from an object is reflected by a surface, it changes direction. It bounces off the surface at the same angle as it hits it.

Smooth, shiny surfaces such as mirrors and polished metals reflect light well. Dull and dark surfaces such as dark fabrics do not reflect light well.





# COMPUTING: PROGRAMMING

## KNOWLEDGE ORGANISER



### Overview

#### Events and Actions in Scratch



- **Programming** is when we make a set of instructions for computers to follow.

- **Scratch** is a program that we can use in order to code our own stories and animations. We can use **event and action command blocks** in order to make sprites carry out acts when certain prompts take place.



- We use **algorithms** (a set of instructions to perform a task) to sequence movements, actions and sounds in order to program effective animations.

### Event and Action Blocks

- **Event Blocks:** Event blocks are coloured yellow and are used to sense different events that happen, e.g. the green flag being clicked, when a key is pressed, or when a sprite is pressed. They are needed for every project.

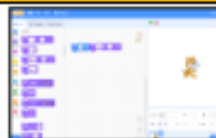
- **Action Blocks:** Action blocks include 'Motion' blocks (coloured blue), 'Sound' blocks (pink) and 'Looks' blocks (purple). They make the sprite move, make sounds and change appearance when the event is triggered.



### The Basics of Scratch

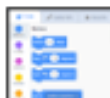
- **What is Scratch?** Scratch is a website/ app that lets us code our own stories, games and animations.

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



There are three main areas in Scratch:

- **The Blocks Palette** (on the left) contain all of the different blocks: puzzle piece commands which control the animation.



- **Code Area** (in the middle) is where the blocks are placed to create a program.



- **Stage with Sprite** (right) is where the output of the program is presented. The sprite is the character.



**Adding/Removing Sprites:** This can be done here, at the bottom of the stage. There are many sprites to choose from.

**Attributes:** There are three attributes of the sprite which we can change to make our animation: Code, Costumes, Sounds.

- **Backdrops:** Backdrops can be added by clicking on this icon (bottom right of the screen, below the stage).



### Sequencing and Algorithms

- A **sequence** is a pattern or process in which one thing follows another. In Scratch, blocks can stack vertically on top of one another to create sequences.

- Designing an **algorithm** (set of instructions for performing a task) will help you to program the sequence that you require.



- **Programming** is when we move the blocks into the position (based on our algorithm design). Programming uses a code that the computer can understand.

### 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.



### Important Vocabulary

Programming

Scratch

Blocks

Commands

Code

Events

Motion

Sequence

Trialling

Debugging





# COMPUTING: PROGRAMMING

## KNOWLEDGE ORGANISER



### Overview

#### Sequencing in Scratch



- Programming is when we make a set of instructions for computers to follow.

- Scratch is a program that we can use in order to code our own stories and animations.

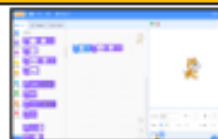
- We use algorithms (a set of instructions to perform a task) to sequence movements, actions and sounds in order to program effective animations.



### The Basics of Scratch

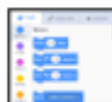
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### Programming Using Blocks

- **Basic Programming:** Make sure that the feature of the stage that you want to program (e.g. sprite, background) is selected by clicking on it. Drag the block command that you want onto the code area. Blocks can be deleted by right-clicking on the block and selecting 'delete block.'



- **Block Editing:** White areas on blocks can be edited. Click on them and type in the preferred value.



- **Running the Code:** You can run your animation by performing the action stated in the event block (e.g. clicking the event block). If this does not work, you may need to debug your animation (find errors and fix them).



### Sequencing and Algorithms

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

- In Scratch, blocks can stack vertically on top of one another to create sequences.

- **Event blocks** are used to start sequences. They are orange and have a curved shape at the top.



- Designing an **algorithm** (set of instructions for performing a task) will help you to program the sequence that you require.

### Making Music

- Several sprites, each following connected sound sequences, can create music!



- In order to do this, you will need to **carefully plan your algorithm**.



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



### Important Vocabulary

Programming

Scratch

Blocks

Commands

Code

Sprite

Stage

Costume

Backdrop

Debugging

# Year 3 PE - Summer 1 Indoors

## Prior Learning

Modified actions independently using different pathways, directions and shapes. Consolidated and improved movements and gymnastics actions. Related strength and flexibility to actions. Used basic compositional ideas.

## Unit Focus

Identify similarities and differences in sequences. Develop body management over a range of floor exercises. Attempt to bring explosive moves into floor work. Show increasing flexibility in shapes and balances.

## We are learning...

1. to perform Japana
2. to use bounces and broad jumps in a sequence.
3. to attempt a half-lever.
4. to transition from a Japana to another shape with control.
5. stretches while moving and when we are still to increase our flexibility.
6. to show strength, flexibility and control in our sequence.

## Key Questions

1. What is a dynamic and static stretch?
2. How can you make transitions smooth and fluent?
3. How can you improve body tension?
4. Can you suggest other actions to include in your sequence?

## Equipment

Mats, hoops, cones, wall bars, bean bags, low apparatus, skipping ropes, ropes, action cards.

## Vocabulary

Sustained, explosive, power, control, group, similar, different, bounce, box splits, fluency, dynamic, static, half lever, extension.

## Concepts

Dynamic stretching improves mobility while moving through a range of motion, often in a manner that looks like the activity that is going to be performed. Static stretching is holding a stretch without movement.

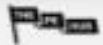
## Assessment Overview

**Head** - Able to identify some primary muscles.

**Hand** - Develop body management over a range of floor exercises.

**Heart** - Comment on a peer's gymnastic sequence, describing what they did well.





### Prior Learning

Experienced different games and activities where throwing and catching skills were used. Had the opportunity to hit and strike a ball with racquets and bats. Played in simple, striking and fielding games.

### Unit Focus

To be able to play simple rounders games. Apply some rules to games and develop and use simple rounders skills.

### We are learning...

1. to get into the best body position to field a ball.
2. to bowl with some consistency in a game.
3. to hit a moving ball with one hand.
4. to stop a moving ball with the long barrier technique.
5. to throw longer distances using the overarm technique.
6. to select and apply new skills in a competition.

### Key Questions

1. Why do we need to return the ball to the bowler/bases as quickly as we can when fielding?
2. Why do we need to be directly behind the ball before getting into the long barrier position?
3. Why is the forward-stepping action significant when bowling?

### Equipment

A range of balls, a range of bats and striking equipment, bases, button cones, batting cone, posts.

### Vocabulary

Batting, fielding, bowling, bases, long barrier, batter, bowler, fielder, innings, no ball, batting box, backstop, rounders, half rounders.

### Rules

- Batters will face a certain number of balls each or play within a time limit.
- If a batter hits the ball, they must run around the bases (as many as they want).

### Assessment Overview

**Head** - Explain the importance of being ready in the field.

**Hand** - Bowl an underarm ball.

**Heart** - Identify how to improve own and other's work and be tactful.



### Prior Learning

Experienced different games and activities where throwing and catching skills were used. Had the opportunity to hit and strike a ball with racquets and bats. Played in simple, striking and fielding games.

### Unit Focus

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### Assessment Overview

**Head** - Explain the importance of being ready in the field.

**Hand** - Bowl an underarm ball.

**Heart** - Identify how to improve own and other's work and be tactful.



# Year 3 PE - Summer 2 Indoors

## Year 3 - Athletics

## Knowledge Organiser

### Prior Learning

Linked running and jumping movements. Move safely around between and over apparatus. Worked with a variety of equipment.

### Unit Focus

Control movement in response to instructions. Demonstrate agility and speed. Jump for height and distance. Throw with speed and power and apply appropriate force.

### We are learning...

1. jumping and hopping sequences.
2. to run at different speeds.
3. to approach and jump hurdles.
4. to throw a javelin using the pull-throw technique.
5. a variety of skipping techniques.
6. to keep score accurately over a range of events.

### Key Questions

1. Did you complete an activity and change your technique to improve your score?
2. What recording system did you use for counting and keeping track of points scored?

### Equipment

A variety of balls, hoops, bean bags, quoits, throw-down markers, foam javelins, balloons, stopwatches, measuring tape, skipping ropes, and low hurdles.

### Vocabulary

Run, jump, throw, agility, power, speed, track, force, distance, curve, accelerate, hurdles, pull, record, pace, approach, combine.

### Rules

- All players compete in all activities.
- Groups accumulate scores across all activities.

### Assessment Overview

**Head** - Compete with others and record points.

**Hand** - Link running and jumping activities with some fluency and consistency.

**Heart** - Identify how to improve.



# Year 3 PE - Summer 2 Outdoors

## Year 3 - Cricket

## Knowledge Organiser

### Prior Learning

Experienced different throwing and catching games. Had the opportunity to hit and strike a ball with racquets and bats. Played in simple, striking and fielding games.

### Unit Focus

Adhere to some of the basic rules of cricket. Develop a range of skills to use in isolation and a competitive context. Strike a bowled ball.

### We are learning...

1. to hit a stationary ball into space using the straight drive.
2. to bowl underarm to a batter with some consistency.
3. to use the correct footwork to strike a bowled ball.
4. to stop a moving ball using the long barrier technique.
5. to throw longer distances overarm.
6. to perform as a wicketkeeper.

### Key Questions

1. What is the purpose of the long barrier?
2. What can we do as batters to help each other when trying to get runs?
3. Why do we need to return the ball to the bowler/wicketkeeper as quickly as possible when fielding?

### Equipment

A range of balls, a range of bats and striking equipment, stumps, button cones, batting cone.

### Vocabulary

Batting, fielding, bowling, bat, wicket, stump, crease, boundary, run, batsman, bowler, wicketkeeper, innings, forward drive, long barrier, over.

### Rules

- Each batter faces one over, which consists of 6 balls.
- Each batter starts with 10 points.
- If the batter is caught or bowled out, they lose 1 point.
- If they complete one run around the target area and back, they win 1 point.

### Assessment Overview

**Head** - Adhere to some basic cricket rules.

**Hand** - Stop a moving ball.

**Heart** - Field as a team to return the ball to the bowler/base effectively.

