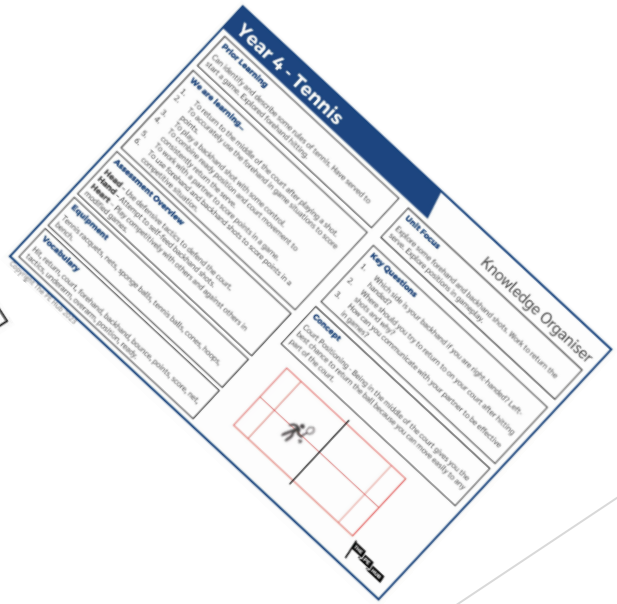
Year 1
Knowledge Organisers

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 1 for the Spring term which will also be in pupil’s books and on working walls in school.



Year 1 Science - Spring 1 and 2

Year 1 SCIENCE, – Animals Including Humans

KNOWLEDGE ORGANISER

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

In Reception, under the topic of 'Growing', the children will have learnt about:

- Male/Female animals and their young
- A frog's life cycle
- Caterpillars and Butterflies
- African Animals
- Farm Animals
- Staying healthy
- Labelling the main body parts

In Year 1, we learnt in our topic: Animals including humans - (Common animals, parts and diets)

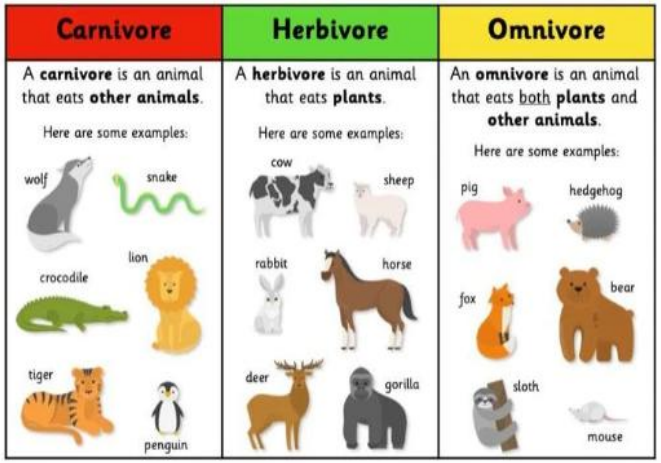
- to identify and compare the Animals, including humans (Common animals, parts and diets)
- to identify and name a variety of common animals that are carnivores, herbivores and omnivores
- to identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- to describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)
- to identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

In Year 2, we will learn in our topic: Animals including humans - (Growth, survival and health)

- to notice that animals, including humans, have offspring which grow into adults
- to find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- to describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

HERBIVORE, CARNIVORE AND OMNIVORE

All animals have to eat food to live and grow. Some animals eat only plants. They are called herbivores. Some animals eat only meat. They are called carnivores. Some animals eat both plants and meat. They are called omnivores.



VERTEBRATES AND INVERTEBRATES

VS

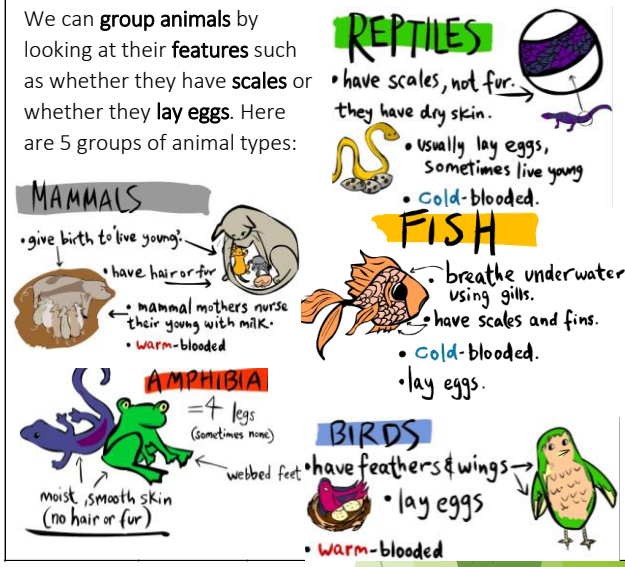
Vertebrates are animals that have a backbone and invertebrates are animals that do not have a backdone. Humans are vertebrates because we have a backbone.

Key Vocabulary

vertebrate invertebrate backbone carnivore omnivore hermivore amphibians birds mammals fish reptiles body body parts

ANIMAL CLASSIFICATION

We can **group animals** by looking at their **features** such as whether they have **scales** or whether they **lay eggs**. Here are 5 groups of animal types:



PARTS OF THE BODY

The human body comes in lots of different shapes and sizes. But most are made up of the **same parts**, which do the **same jobs**. We all have a **skeleton**. The bones in your skeleton help you to stay standing up and let you move around. Here are some of our other **body parts**:

Year 1 History - Spring 1

YEAR 1 HISTORY – THE VICTORIANS

KNOWLEDGE ORGANISER

What knowledge have we learnt before, what we will learn this year and what will come after?

In EYFS, pupils learnt the building blocks to our History curriculum by learning about the lives of people around them, as well as beginning to recognise similarities and differences between things in the past and things now. We do this through stories and role play.

In Year 1, we will learn about what life was like for children in the 'Victorian era'. We will learn about the monarch of the time, Queen Victoria, and learn about the legacy of some Victorian traditions.

In Year 2, we will continue learning about the past by studying the 'Great Fire of London' as well as the lives of Mary Seacole and Florence Nightingale.

VICTORIAN TIMELINE

1819 Queen Victoria is born

1825 First passenger railway opened

1837 Victoria became Queen

1840 Married Albert

1863 Albert died

1901 Victoria died

LIFE AS A CHIMNEY SWEEP

Chimney boys would often work with an adult Chimney Sweep. The Chimney sweep would use a long brush to clean the soot from inside the chimneys. Being a Chimney Sweep was a dirty and dangerous job. Children would often get ill from breathing in all sorts of soot and injure themselves from falling.

LIFE FOR VICTORIAN CHILDREN

abacus

blackboard

dip pen & ink

cane

Victorian schools were different from schools today. Victorian schools were very strict and had lots of rules. Students had to stand up every time an adult entered the room and they had to write with their right hand, even if they were left-handed! Punishment was very harsh and a child would get the cane for bad behavior or be made to stand in the corner for mistakes in class.

school bell

back straightener

desk

chalk & slate

QUEEN VICTORIA

Queen Victoria, born in 1819, was the Queen of the United Kingdom for 64 years, from 1837 to 1901. She was a young queen when she became monarch at 18. She is famous for her long reign in the period known as the 'Victorian era'.

The Victorians introduced many traditions which we still celebrate today such as: sending Christmas cards, having a tree inside for a Christmas tree and eating a turkey on Christmas day.

Key Vocabulary

Queen Victoria	Prince Albert	Queen	Victorians	Victorian era	monarch	Chimney sweep	child	brush	soot	chimney	dirty
dangerous	desk	chalk & slate	cane	school	punishment	tradition	Christmas				

Year 1 Geography - Spring 2

YEAR 1 GEOGRAPHY – HOT AND COLD PLACES

KNOWLEDGE ORGANISER

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

In Early Years the children begin to recognise the important processes and changes in the natural world around them which include looking at the seasons.

In Year 1, we will build upon this previous knowledge and can explain the features of hot and cold place. We consider the difference between people who live in a hot and cold place and what they might wear in these countries. With the assistance of a globe we will learn about the equator and north and south pole.

The main features of a hot and cold place

The features of a cold place are that there will be little sunlight everyday.. The winters will be particularly cold and there is lots of snow and ice. Not many people live in cold places.

The features of a hot place are that there will be lots more sunlight during the day. The summers will be particularly hot. The desert is a hot place and there is little vegetation. There is little rainfall. Lots more people live in warm places.

HOOK LESSONS

For our Geography hooks, the children will be unpacking a suitcase and sorting the clothes for either a hot or cold place. Additionally, we will be using a globe and an atlas to establish where different countries are located. There will be discussions around where children have been on holiday and if it was a hot or cold place and that countries features.

People who live in hot or cold places and the clothing they could wear

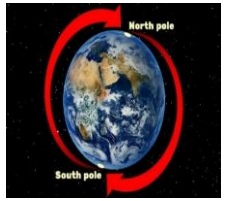
People who live in cold place would wear warm/thick clothing to keep warm such as woolen hats, jumpers, scarves and gloves. They will wear thick socks and boots. They will eat hot food and have hot drinks to keep warm.

People who live in hot place will need to protect their skins from the sun and will need to wear a hat or keep their heads covered and will wear light cotton clothing and sandals to stay cool They will need to drink plenty of water to keep hydrated.

THE EQUATOR AND THE NORTH/SOUTH POLE

World Weather. This is an image of a globe. The red line which runs across the middle of it is called the **Equator**.

Countries that are closer to the Equator have the sun directly above them for most of the year, so they stay hot all year round.



North and South Pole. The North Pole is at the top of the world. The South Pole is at the bottom of the world. Both are very cold, icy places. The Poles have six months of daylight

Key Vocabulary

Equator North Pole South Pole Weather Chart Storm FrostSnow Cloud Snow Ice Wind Spring Summer Autumn Winter Hydrated Sunlight Desert Vegetation Rainfall Protection Population

Year 1 DT - Spring 1

YEAR 1 DT – MAKING A SOCK PUPPET

KNOWLEDGE ORGANISER

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

In EYFS, we explored the building blocks of our DT curriculum through creative play in areas such as junk modelling.

In Year 1, we will make a sock puppet with a moving mouth and we will decorate it's features by selecting different types of materials and joining these with glue.

In Year 2, we will extend our learning in Textiles by making Tie dye T-shirts using string and elastic bands to tie different patterns into the fabric.

TYPES OF PUPPETS

Puppets have been used for hundreds of years to tell stories and entertain people. A puppet is model that is controlled by a person. It can be controlled by rods, sticks, strings or the hands and fingers of a puppeteer.

JOINING MATERIALS USING GLUE

Glue can be a useful product to help us **join two materials together**. We can use **Pritt stick** or PVA **glue**, depending on the thickness of the material.

ADDING DESIGN FEATURES

Puppets are **colourful** and use a variety of different **materials**, such as ribbon, felt, googly eyes and foam, to create **body parts** or design **features**.

Materials can be selected based on their **texture** or **colour** and can be cut to shape using **scissors** and then **glued** in place to create the characters features.

ADDING A MOVING MOUTH

Many **puppets** are controlled by the **user's hand**. Puppets can have a **simple mouth mechanism** by glueing a **cardboard template** to the outside of the **sock**, with a **fold** in the middle of it, to create an opening mouth.

Key Vocabulary

Puppet	puppeteer	hand puppet	finger puppet	sock puppet	stick puppet	glue	Pritt stick	PVC glue		
material	ribbon	felt	googley eyes	fluffy	soft	flat	colourful	scissors	cardboard	fold

Year 1 Art - Spring 2

YEAR 1 ART – WATERCOLOUR FLOWERS

KNOWLEDGE ORGANISER

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

In EYFS, we will study different artists and create art inspired by their work. We will be introduced to the idea of colour mixing and we will explore what happens when we use a variety of materials, tools and techniques.

In Year 1, we will further our understanding of the colour wheel by mixing secondary colours and begin to understand how colours can be matched to emotions. We will learn some watercolour techniques and draw and paint flowers inspired by the artist Georgia O'Keefe.

In Year 2, we will further our colour mixing skills as well as adding white to colours to make different tints. We will develop our pencil skills further, using patterns and texture in our sketching and begin to work with clay.

SECONDARY COLOURS

Mixing two primary colours together will create a secondary colour:

Blue + Yellow = Green
Blue + Red = Purple
Red + Yellow = Orange

COLOURS TO MATCH EMOTIONS

Artists use different colours to show different emotions or moods. Happy is often associated with the colour yellow, red for anger and blue for sadness.

FOCUS ARTIST - GEORGIA O'KEEFFE

Georgia O'Keeffe is a famous artist known for painting close-up views of flowers. She used oil paints in vibrant, bold colours. Painting the flowers at such a close range makes the viewer see the object in a completely different way. Often the close up views only showed part of the flower.



WATERCOLOUR TECHNIQUES

Artists use many different techniques for applying watercolour paint. Two of these techniques are:

- Wet on wet - a wash which covers the canvass with water first before adding one or more colours.
- Repeating patterns - The second is a pattern in which the artist creates a repeating pattern with the brush strokes.

Key Vocabulary

colour wheel, primary colour, secondary colour, blue, yellow, green, purple, orange, red, colour mixing, emotion, close-up, detail, flower, watercolour, wash, wet on wet, repeating pattern, brushstroke

Year 1 PE - Spring 1

Year 1 – Gymnastics Unit 1

Knowledge Organiser

Prior Learning

Experienced jumping (taking off and landing). Developed some concept of space and use of space. Developed confidence in fundamental movements.

Unit Focus

Use simple gymnastics actions and shapes. Apply basic strength to gymnastic actions. Begin to carry apparatus. Recognise like actions and link them.

We are learning...

1. to perform 'like' actions in a sequence.
2. to carry and set up apparatus safely.
3. to perform shapes on large and small body parts.
4. to take off and land and use shape in our jumps.
5. to travel on our feet, showing good body tension.
6. how we can create different levels in our performance.

Key Questions

1. What are 'like' actions?
2. Why is it important to have good body tension when rolling?
3. What is the difference between large and small body parts when performing a shape?

Equipment

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

Vocabulary

Balance, body tension, tensed, relaxed, shape, stretched, curled, carry, control, extension, fast, hang, high, jump, like, link, low, safety.

Concept

Any shape is either performed on a large or small body part. Most shapes can be adapted to be performed in a different way taking it from a small to a large body part e.g. a stretch shape from standing (feet small body part) to laying on the tummy (large body part).

Assessment Overview

Head – Use words such as rolling, travelling, shape, jump, and take-off.
Hand – Recognise like actions and link them together.
Heart – Value other's efforts when they perform; watch and listen.

Year 1 PE - Spring 1

Year 1 – Hit Catch Run Unit 2

Knowledge Organiser

Prior Learning

Able to hit objects with a hand or bat. Tracked and retrieved a rolling ball. Thrown and caught a variety of balls and objects.

Unit Focus

Develop sending and receiving skills to benefit fielding as a team. Distinguish between the roles of batters and fielders. Introduce the concept of simple tactics.

We are learning...

1. To run quickly to stump a base
2. To begin to hit a ball with accuracy
3. To move and intercept a ball
4. to run around bases to score points
5. To catch a ball to get a batter out
6. to stop other teams from scoring points.

Key Questions

1. Why should you try to hit to space?
2. How did you try to score maximum runs?
3. Why does catching the ball mean a player does not get any runs?

Equipment

A variety of balls, a variety of bats/rackets, cones, hoops, targets, batting tee, button cones, quoits.

Vocabulary

Batter, bowl, catch, collect, feed, field, hit, hitter, pick up, retrieve, roll, stop, strike, throw.

Rules

- The first batter throws or hits the ball into space.
- As soon as the ball is struck, the batter runs around the bases in order.
- The fielders move to collect the ball as quickly as possible and return it to the hoop.

Assessment Overview

Head – Can choose where to send the ball to maximise the chance to score.
Hand – Retrieve and return a ball to base.
Heart – Decide as a team the best positioning to intercept balls.

Year 1 PE - Spring 2

Year 1 – Gym Unit 2

Knowledge Organiser

Prior Learning

Used simple gymnastics actions and shapes. Applied basic strength to gymnastic actions. Begun to carry apparatus. Recognised like actions and link them.

Unit Focus

To show a range of recognised point balances. To introduce turn, twist, rock, and roll and to link these. To perform unison simple canon and unison techniques.

We are learning...

1. to move on, off and over apparatus and use the 'Magic Chair' landing.
2. to rock on different parts of our body and rock using shape.
3. to perform specific point balances such as 'h' and 'y' balances.
4. to perform actions at the same time as others (unison)
5. to perform actions one person after the other (canon).
6. to turn and jump and quarter and half turn.

Key Questions

1. Why is a magic chair landing necessary as we jump from higher levels?
2. Why do we call them h and y balances?
3. Can you think of any other activities when people perform in unison?

Equipment

Mats, hoops, cones, bean bags, low apparatus, floor spots.

Vocabulary

Balance, body tension, tensed, rock, roll, link, quarter, half, turn, spin, twist, unison, canon

Skill

Magic chair landing

- Land on two feet and bend your knees to absorb impact (as if sitting on an imaginary chair).
- Keep your head up, looking forward, not at the floor.
- Arms forward about shoulder height.
- Straighten your legs and finish in a good position with arms extended above the head.

Assessment Overview

Head – Decide which supporting concepts and actions to add to their sequence.
Hand – Show spinning and rocking in isolation and short sequences.
Heart – Move on, off and over an object with confidence.

Year 1 PE - Spring 2

Year 1 – Hit Catch Run Unit 2

Knowledge Organiser

Prior Learning

Able to hit objects with a hand or bat. Tracked and retrieved a rolling ball. Thrown and caught a variety of balls and objects.

Unit Focus

Develop sending and receiving skills to benefit fielding as a team. Distinguish between the roles of batters and fielders. Introduce the concept of simple tactics.

We are learning...

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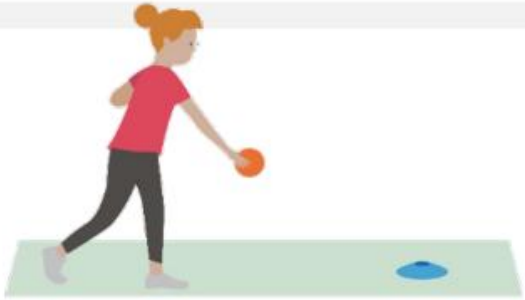

Year 1 Computing - Spring 1

COMPUTING: PROGRAMMING

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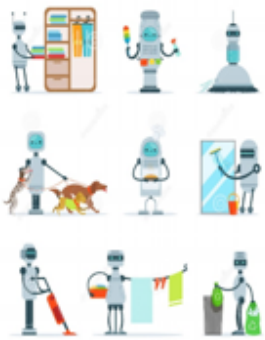
KNOWLEDGE ORGANISER

Overview



Moving a Robot

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

-Robots are one type of machine that can follow programs. Floor robots include Bee-bots and Blue-bots.

-Floor robots have buttons which help us to direct them. We can use algorithms (a set of guidelines to perform a task) to program floor robots along routes.

Buttons and Programs

-**Buttons:** Bee-bots have buttons on the top. They each make the Beebot do something different (see picture).

-The arrows move the Bee-bot in different directions.

-The GO button makes the Bee-bot start its program. (on some models, it also pauses the Beebot in-program).

-**Programs:** A program is a series of instructions. We can program the Bee-bot by pressing the direction buttons (in order) that we want it to move in, followed by GO.

-The X button makes the Bee-bot delete the program and make a new program. Switching the Bee-bot off and on again also deletes the program.

Robots and Floor Robots

-**Robots:** Robots are machines that we can program to do human jobs.

-Robots help us to do things, for example to help us clean, mow and learn!

-Robots in factories make things, and in hospitals they help make us better.

-Bee-bots: Bee-bots are a type of floor robot.
-We can programme Bee-bots to move around.

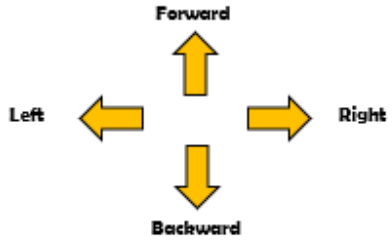
Bee-bots should only be used on the floor, and not tables etc. They can be damaged if they fall from high surfaces. (Other floor robots, e.g. Blue-bot, can also be used).

-Turning on a Bee-bot: Before we use a Beebot, we need to make sure it is charged.

To turn it on, using the switch underneath. You can tell that the Bee-bot is on because its eyes light up. Switch it back off again after you have finished using it.

Directions

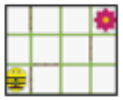
-In order create clear routes for our Bee-bots, we need to be sure of our directions.



Make sure that you stand behind Bee-bot.

Routes and Algorithms

-A route is the course that we travel to get somewhere. We use algorithms (a set of guidelines to complete a task) to program our floor robot to take a route to where we want it to go.



-We should think carefully about how to avoid obstacles. We should also consider how many times we need to press each button to travel the correct distance.

Important Vocabulary

Programmed	Robot	Algorithm	Button	Direction	Forward	Backward	Left	Right	Route

Year 1 Computing - Spring 2

COMPUTING: PROGRAMMING

Y1

KNOWLEDGE ORGANISER

Overview

Animations in Scratch Jr.

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

-Scratch jr. is a program that we can use in order to code our own stories and animations. It involves sprites (characters on the screen).

-We use algorithms (a set of instructions to perform a task) to program the sprite to do different things.

The Basics of Scratch Jr.

-**What is Scratch Jr?** Scratch is a website/ app that lets us code our own stories, games and animations.
-**Sprites:** Scratch Jr. uses characters called sprites. The main sprite is a cat called Scratch.
-**Home:** Clicking on the house takes you 'home' to your project screen.

Getting Started

-The + (right) starts a new project.

-These (right) are the **programming blocks.** We drag them into the **programming area** (right). Clicking the block in the area makes the sprite perform on the stage.

-**Background:** Backgrounds are added by clicking this icon (right).

-**Start Blocks:** Start blocks are yellow. These are used to start/ run programs.

-**End Blocks:** End blocks are red. These show what happens at the end of your program.

Sequencing

-Sequences: -A sequence is a pattern or process in which one thing follows another. In Scratch Jr. we can stack blocks together side by side in order to create programs made up of sequences.

-Deleting Blocks: Blocks can be removed from programs by dragging them from the programming area back into the blocks palette.

-Repeating Blocks: For something to happen more than once, we can change the number underneath the block.

-Running the Code: Run your animation by tapping the full screen icon, and then the green flag.

Algorithms and Programming

-An **algorithm** is a set of instructions for performing a task. Designing an algorithm can help us to make the sprite do the things that we want it to do.

-**Programming** is when we move the blocks into the position (based on our algorithm design). Our programming codes the sprite to perform the actions.

Debugging

-Sometimes, things don't work exactly how we want them to the first time. This may be a problem with our algorithm, or we could have made a mistake in our programming.

-If the animation does not work correctly the first time, remember to **debug** it. This means finding and fixing the problems.

Important Vocabulary

Programming	Scratch Jr.	Sprite	Home	Command	Block	Stage	Background	Algorithm	App