

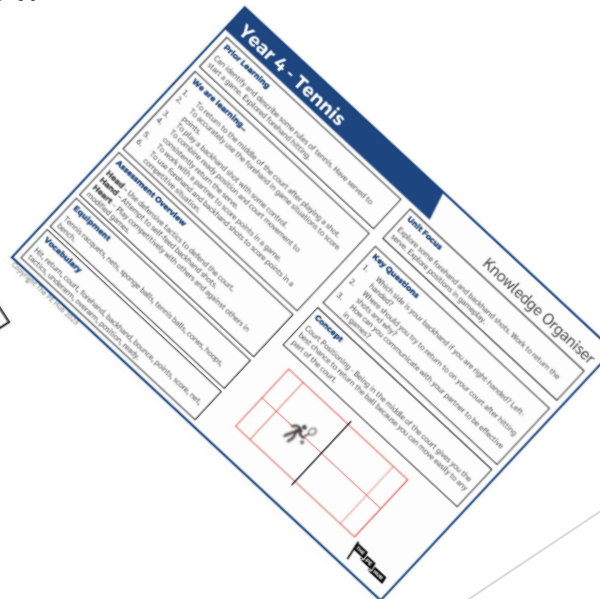
Year 2

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 2 SCIENCE – PLANTS (SEEDS AND BULBS) 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, we learnt in our topic: Plants (Wild and garden).

- identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- identify and describe the basic structure of a variety of common flowering plants, including trees

In Year 2, Spring term, we will learn: Plants (seeds and bulbs).

- observe and describe how seeds and bulbs grow into mature plants
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

In Year 3, we will develop this further and learn about: Plants (Parts of plant and growth)

- identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- 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
- investigate the way in which water is transported within plants
- explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal

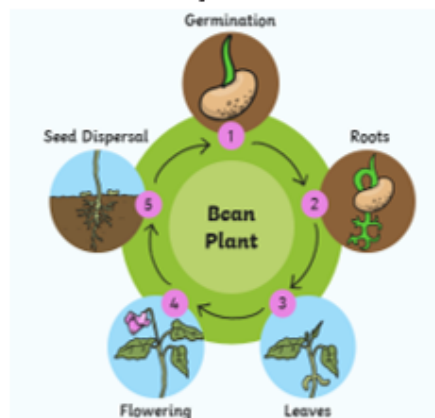
SEEDS AND BULBS



Most plants grow out of seeds and bulbs.



Seeds grow roots and shoots. Roots and shoots then grow leaves above ground. Many plants make flowers, which turn into fruits. Flowers and fruits make their own seeds. We call this a life cycle.



Focus scientist – David Bellamy - Botanist

David James Bellamy (18 January 1933 – 11 December 2019) was an English author, broadcaster, environmental campaigner and botanist.

A botanist is someone who studies plants. Bellamy wrote, appeared in or presented hundreds of television programmes on botany, ecology, environmentalism and other issues. His television series included: *Bellamy on Botany*, *Bellamy's Britain*, *Bellamy's Europe* and *Bellamy's Backyard Safari*.



What a plant needs to grow and stay healthy

In order to grow and to be healthy, a plant needs:



1. Water: A plant would need water to help it grow.
2. Nutrients: Plants need water to suck up nutrients from the soil. Nutrients are the good things in soil which will help a plant grow and be healthy
3. Light: A plant needs light to help provide food for the plant. A plant would need light to help it be healthy.
4. Suitable temperature: Plants can grow in many different places, but a sunny window sill would be best. On a sunny window sill, the plant will get the warmth and light it needs. In time, it will grow big and strong! The plant won't get the warmth and light it needs in a cold, dark fridge. It won't grow big and strong.

The Right Temperature

Plants need the right temperature to stay healthy too! The right temperature is different for different types of plants.



A cactus is from the desert, so it is used to a hot temperature.



Daisies can grow and be healthy in much cooler temperatures.

Seeds need the right temperature to start turning in to a plant. Plants also need the right temperature to be able to turn sunlight into food.

Key Vocabulary

leaf stem root trunk seed flower fruit warmth sun water light warm warmer warmest

YEAR 2 SCIENCE – LIVING THINGS AND THEIR HABITATS 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, we learnt in our topic: 'Plants' to:

- identify and name a variety of common wild and garden plants that live in their gardens and the school grounds

In Year 2 Spring Term, in our topic 'Living things and their habitats' we will learn to:

- explore and compare the differences between things that are living, dead, and things that have never been alive
- identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- identify and name a variety of plants and animals in their habitats, including micro-habitats
- describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

In Year 4, we will develop this further and learn, in our topic 'Living things and their habitats', to:

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

TYPES OF HABITAT



Our habitat is where we live.
We live in an urban habitat in England.

Urban Habitats

Flowering plants such as nettles, daisies, dandelions and buttercups grow in parks, gardens and hedges. Many insects, slugs and snails live among the plants.

Some animals, such as squirrels and garden birds, get their food from the trees and hedges that grow in cities. Other animals like foxes, pigeons and rats are able to live in cities because they get most of their food from the waste that people leave behind.

Woodland Habitats

In a woodland habitat there are lots of trees that grow close together. Common trees that grow here include English oak, ash, beech, hawthorn and birch. The woodland provides a home for many minibeasts like worms, slugs and snails. It also provides a home for larger creatures, such as foxes, badgers and squirrels.

Pond habitats

A pond is a still body of fresh water. Some plants like water lilies, hornwort and duckweed live in the water. Other plants like irises and marsh marigolds grow in the damp soil near the pond's edge.

These plants provide food and shelter for worms, slugs, snails, and insects like damselflies, dragonflies, mayflies and water beetles. Amphibians like frogs, toads and newts eat the small creatures, and in turn, these are eaten by mammals like bats and water voles. Many birds live near the water, including ducks, moorhens and kingfishers.

Coastal Habitats

These are places where the land meets the sea. Some of these habitats are sandy, some are marshy, and some are high, rocky cliffs. The plants here have adapted to grow in salty, windy conditions. These include samphire, juniper, sea kale, glasswort and marram grass. Many of the creatures that live in coastal areas survive in rock pools left by the tides, like barnacles, mussels, crabs and starfish. Wading birds such as oystercatchers, plovers and sandpipers feed on these creatures, while seabirds like seagulls, kittiwakes, gannets and skuas mainly eat fish from the sea. Dolphins, porpoises and even whales can be seen in the waters around the coast. Seals and otters spend most of their lives in the sea but come to the land to rest and care for their babies.

Key Vocabulary

LIVING/DEAD/NEVER ALIVE

Characteristics of living things

Movement
Respiration
Sensitivity

Growth
Reproduction
Excretion
Nutrition

MRS GREN



There are 7 life processes that show us something is alive.

If a thing is alive, it will do each of these life processes.

If the thing doesn't do these processes, but did at some point in the past, it is dead.

If something has never done these 7 life processes, it has never been alive.

FOOD CHAINS

A food chain shows how each animal gets its food. Food chains are one of the ways that living things depend on each other to stay alive.

The arrows in a food chain mean 'is eaten by'.

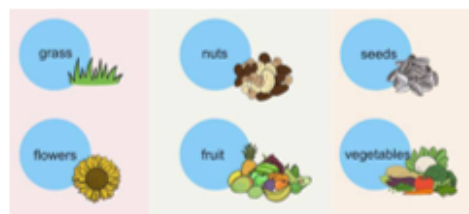


A berry is eaten by a mouse which is eaten by a snake which is eaten by an eagle.



Grass is eaten by a cow which is eaten by a human.



















Animals often get their food from plants, here are some different examples of food sources for animals:



habitat pond woodland urban coastal carnivore herbivore omnivore living dead food chain movement
respiration sensitivity growth reproduction excretion nutrition

YEAR 2 HISTORY — CHANGES IN OUR LOCAL AREA KNOWLEDGE ORGANISER



What knowledge have we learnt before, what we will learn this year and what will come after?	Timeline	South Hill Primary School	
<p>In EVFS, the children will be start to understand the concept of 'past' and 'now' and will:</p> <ul style="list-style-type: none">Lives of people around usSimilarities and differences between things in the past and nowUnderstand the past through settings, characters and storytelling <p>In Year 2, the children build on their understanding of 'past' and 'present' to compare their school and town now to what it was like in the past.</p> <ul style="list-style-type: none">Significant Historical Events, people and places in the local environment. South Hill Primary School, Hemel Hempstead and the Water Gardens - 1947 AD to present day <p>In Year 6, the children will learn about World War 2, having touched upon it in this topic in Year 2 where they consider how people moved to Hemel Hempstead having left London in the aftermath of The Blitz.</p> <ul style="list-style-type: none">British History beyond 1066: World War 2 - 1939 to 1945 AD	<p>Hemel Hempstead was established as a new town – 1947 AD</p>  <p>South Hill Primary School was built – 1951 AD</p>  <p>Geoffrey Jellicoe created the Water Gardens – 1962 AD</p>  <p>The Water Gardens were redeveloped – 2013AD</p>  <p>South Hill Primary School was renovated – 2014 AD</p> 	<p>In the past</p> <ul style="list-style-type: none">There was only the original buildingOwls classroom was Year 5 and Kingfishers was Year 6Mr B's PE cupboard was the DT room (it had an oven inside)Teachers dressed very smartlyThe library was the Year 2 classroomThe staffroom was a music roomThere was small pool to sail boats and bathe	<p>Present day</p> <ul style="list-style-type: none">KS2 has a new buildingWe have a daily mile trackNew uniform and PE kitWe have a KS1 and a KS2 playground nowThe headteacher's office is upstairsThe dining room and the hall are in their original placesWe have a school pond and lots more play equipment
The Water Gardens		Hemel Hempstead	
<p>To bring this topic to life, the children will look at pictures of the school and walk around it to see how it has changed over time. We will also take a trip down to the Water Gardens in Hemel Hempstead to observe changes in the local area.</p>  	   	<p>Cotterells Hill</p>  <p>The Kodak Building</p>  <p>Our town has changed a lot over the years! Hemel Hempstead was an ancient settlement which grew in size in the 1940s to make room for people who wanted to move out of London after the bombings during World War 2. It has been changing ever since.</p>	<p>Hemel Hempstead town centre</p>  <p>The KD Tower</p>  <p>Hemel Hempstead old town</p>  <p>The Odeon Cinema/ The Full House pub</p>  <p>Hemel Hempstead market</p> 
<p>The Water Gardens were built in 1962 by Geoffrey Jellicoe to make the town nicer for those who lived there. This involved widening the river banks of the Cade river, adding in water features and a beautiful flower garden. In 2013 it was redeveloped to look how it does now. The buildings around The Water Gardens have changed a lot over time.</p>		<p>Key Vocabulary</p> <p>Past – Present – Then – Now – Before – After - The Water Gardens – Geoffrey Jellicoe – South Hill Primary School – Hemel Hempstead – Gadebridge Park – Old Town – New Town – The Blitz – The Kodak Tower – The KD Tower – Facilities – Citizen</p>	

YEAR 2 GEOGRAPHY – A CONTRASTING LOCALITY WITHIN THE UK KNOWLEDGE ORGANISER



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

In Year 1, through our topic 'Where in the world do we live', we learnt about where we live and began to use atlases and maps to identify countries and Cities in the UK.

In Year 2 we will compare the town we live in, Hemel Hempstead, to a coastal village, West Wittering. We will look at aspects of human and physical geography and consider the impact of the weather and how we would travel from one location to the other.

In Year 4, we will extend our knowledge through our topic 'Where do we come from' by looking at the UK as part of the European Union and finding out about our own background and heritage.

LOCATIONS WITHIN THE UK



Hemel Hempstead is a large town in Hertfordshire in the UK. It is in England. It is near to London, the capital city of England. Hemel Hempstead is north of London but it is in the South East of England.



West Wittering is a village situated in the county of West Sussex, England. It lies near the mouth of Chichester Harbour. It is a coastal location in the south of England.

HEMEL HEMPSTEAD – OUR URBAN HOME



Hemel Hempstead is located on the River Gade, in the county of Hertfordshire, approximately 26 miles north-west of London and 7 miles west of St Albans.



The town has a population of around 79,600. At the end of World War 2 Hemel was built as a "new Town" with new developments enveloping the original town on all sides. The original part of Hemel is still known as the "Old Town".



The town's good transport links and proximity to London have made it a popular residential base for commuters working in the capital.



Key physical features of Hemel Hempstead include the moors, canal, rivers, parks, the shopping centre, the old town and the Magic roundabout.

FIELDWORK/ INSPIRATIONAL DAY/ HOOK LESSON A DAY AT THE BEACH

West Wittering is a popular natural beach on the South coast of England. It is rated in the top ten beaches to visit within the UK due to its unspoilt natural beauty.

As part of our unit of study we will visit West Wittering, experiencing a day at the beach and identifying the geographical features of the landscape. We will consider the weather and select appropriately what we need to take with us.



WEST WITTERING A RURAL COASTAL COMPARISON

West Wittering on the South coast has a large expanse of firm sand, ideal for a day at the beach and with the large amount of beach huts, café and lifeguard presence it is a popular tourist destination on a sunny day.

The population of West Wittering is about 2700 people. The village itself lies a little way inland and has a church of Norman origin, a couple of hotels, a camping site, a village school and a few small shops.

Key physical features are the beach, the salt marsh, the harbour and the church.



Key Vocabulary

Great Britain
seaside East

British Isles
West

United Kingdom
location

city
facilities

town
salt marsh

village
population

rural
coastal
employment

North
shore

South
harbour

YEAR 2 ART – SELF PORTRAITS AND LEAF PRINTING

KNOWLEDGE ORGANISER



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

In Year 1, we will develop our understanding of creating simple patterns in art and progress on to using out fruit and vegetables as printing blocks. We will learn the different printing techniques to create abstract art. We will then learn the flower pounding technique to make a botanical mandala on fabric.

In Year 2, we will continue to develop our printing skills by exploring pressing, rolling, rubbing and stamping. These skills will be used to create some beautiful leaf printings. We will also explore the different mark making tools and how patterns and textures influence our drawings.

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).

PRINT MAKING

Printmaking is an artistic process involving transferring images onto a surface, most often paper or fabric. Traditional printmaking techniques include woodcut, etching, engraving, and lithography, while modern artists have expanded available techniques to include screen printing.

Warhol used this printmaking technique to make artworks that used a repeated image from popular culture, often in different colours. He made pictures of soup cans and coke bottles. He made paintings of American celebrities such as Marilyn Monroe and Elvis Presley.



LINKED ARTIST – ANDY WARHOL

Andy Warhol was part of the pop art movement. He was born Andrew Warhola in 1928 in Pennsylvania. His parents were from a part of Europe that is now part of Slovakia. They moved to New York in the 1920s.

His first job was illustrating adverts in fashion magazines. Now is he known as one of the most influential artists who ever lived!

After this job began using silk screen printmaking to make images as his art. This involves pushing ink through a screen to create an image. It can be used to make lots of copies of the same image



SELF PORTRAITS USING PENCIL

Pencils have different grades determined by how much graphite they contain. The higher the number the thicker and darker the mark left on the paper is. Different grade pencils are used within a drawing to create different effects such as shades and tones.



Charcoals and pastels are an effective medium used in drawing to create texture to a piece of artwork. They come in many forms and are easy to manipulate. The focus upon the amount of pressure used is what gives the range of textures they can produce.

A view finder can be used to help focus on a specific element of an object and not get distracted by what's around it. It enables close attention to be paid to the image that is being created.



LEAF PRINTING AND RUBBING

Leaf printing is a form of art that involves transferring leaves onto another surface through either printing or rubbing.

Leaf printing involves painting onto a leaf, turning over the leaf and pressing it onto another surface. As the leaf is lifted off the surface it leaves the print of the leaf.



Leaf rubbing involves placing a leaf onto a hard surface putting a piece of paper over the leaf and rubbing a crayon, or pencil on the layered paper over the leaf to create the rubbing.

Key Vocabulary

Andy Warhol	printmaking	ink	pop art	rubbing	printing	grades	sketching	drawing	charcoals
	pastels	texture	patterns	viewfinder	rolling	stamping	mark making		

YEAR 2 ART – TEXTILES

KNOWLEDGE ORGANISER



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

In Year 2, through our topic 'Construction/Use of Materials' we designed and made our own emergency vehicles.

In Year 2 through our topic of 'What makes the perfect place to live?' we will design and make our own picnic blanket to take and use for our school trip to the seaside.

In Year 4, this knowledge will be extended when they design and make their own cross stitch keyring, as well as making their own bunting.

HISTORY OF TEXTILES

Textiles are flexible materials woven from fibres, which have been used by humans throughout history for a number of purposes. One of the main purposes being clothing. Other purposes alongside clothing include sheets, towels, linen, carpets, rugs and a wide variety of other products.

Many people enjoy textiles as a hobby and pass this skill onto family members.



PICNIC BLANKET

It was during the Middle Ages that saw the beginning of the picnic in Britain. A picnic is an enjoyable event outdoors where people eat and drink together. Often people would have a blanket to place on the ground or grass so it can be sat on and provide a layer of comfort. Typically the blanket would be a large square or rectangular piece of thick piece of fabric that is soft and waterproof.



Key Vocabulary

textiles	material	join	decorate	letter	needle	thread	by hand	label	blanket	picnic
fabric	felt	design criteria	appealing	sewing	initials	grid	make	improve	template	

PATCHWORK SEWING

Patchwork means various pieces of cloth of different colour and size, sewn together to form a covering.

Sewing is a detailed craft and skill. It involves the joining together of different textile fabrics using a needle and thread, either by hand or by a sewing machine to form a bigger piece of fabric.



To sew people can use a range of different sewing styles to produce strong joins as well as adding to the overall appearance and design. Thinking about the way a product looks is called 'aesthetics', and is highly important in textiles.

The **running stitch** is a quick and easy way to decorate a piece of fabric. When two layers of fabric are held together, just like gluing, the thread will hold the pieces of fabric together. This is by going in and out between the layers of fabric, creating a dotted line effect. This is called a running stitch.



JOINING FABRIC USING GLUE

Another way to create a patchwork piece is by using fabric glue to join fabrics together and possibly create hems.

To create a finished picnic blanket, final decorative pieces can be added. To do this, pieces of fabric can be cut out and instead of using the running stitch method, another way of joining the pieces of fabric is by gluing. Holding one of the fabric pieces up and gluing the underneath will enable this piece of fabric to then be stuck on to the other fabric piece. Allowing different materials to be used. Gluing is one of the most common ways to join fabric/ materials together.



YEAR 2 DT – PICNIC BLANKET

KNOWLEDGE ORGANISER



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

In Year 2, through our topic 'Construction/Use of Materials' we designed and made our own emergency vehicles.

In Year 2 through our topic of 'What makes the perfect place to live?' we design and make our own picnic blanket to take and use for our school trip to the seaside.

In Year 4, this knowledge will be extended when they design and make their own cross stitch keyring, as well as making their own bunting.

In Year 5, this knowledge will be extended through the topic 'Electrical and Mechanical components' by incorporating hydraulics and pneumatics.

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A common type of sewing or stitch is called the running stitch. This is the simplest stitch. It creates a dotted line effect. Remember to leave a space from the previous stitch.

PROPERTIES OF A PICNIC BLANKET

To ensure a picnic blanket can be used for many years and many times it will need to have some important properties to make it reliable and dependable.



The perfect picnic blanket must have a lightweight design, being waterproof, transportable and being comfortable. While a waterproof style is important to make sure that not liquid soaks through the fabric, going for a lightweight design will also ensure it can be carried easily and folded away easily. A good picnic blanket will be comfortable to sit on and ideally soft to make the picnic experience enjoyable and fit for purpose.

Key Vocabulary

textiles	material	join	decorate	letter	needle	thread	by hand	label	blanket	picnic
fabric	felt	design criteria	appealing	sewing	initials	grid	make	improve	template	