

Science Scheme of Work



	Year 2 Autumn	Term
Science (All NC subject content covered)	<section-header><section-header><section-header></section-header></section-header></section-header>	Everyday Materials Pupils should be taught to: • identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper, and cardboard for particular uses • find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting, and stretching. Working Scientifically (WS): During year 2, pupils should be taught to use the following practical scientific methods, processes, and skills through the teaching of the programme of study content: • asking simple questions and recognising that they can be answered in different ways • observing closely, using simple equipment • performing simple tests • identifying and classifying • using their observations and ideas to suggest answers to questions
WS opportunities	Observing over time I can recreate an experiment to prove Rachel Carson's theory. Why is hand hygiene important? Why is hand	

3





3. I can research and describe Louis Pasteur's life and work



Start by sharing this slide with the class on the importance of washing hands:



We wash our hands to help prevent the spread of germs from one person to another.

Louis Pasteur discovered germs. He was born in France in 1822. This is almost 200 years ago! At school, Louis loved learning about science. He went to college to study science and maths, and when he left college, he became a science professor at the university.

He and his wife, Marie, had 5 children. Sadly, three of their children died from a disease called typhoid. This made Louis want to find out more about diseases and infections so that he could find a cure and stop other people dying from illnesses.

At the time Louis was alive, people believed that germs like bacteria just appeared out of nowhere! They knew that germs existed but thought that they could suddenly appear on a person, making them ill. Louis carried out some experiments to prove that germs are living things that can spread between objects and people, through touch or through the air. He used a microscope to see tiny mould germs living on food, and to see germs that cause diseases. His experiments convinced people that germs do spread diseases, and do not just appear. Louis Pasteur showed that germs can be spread through the air or through touch.

Emphasise Louis Pasteur's findings by completing the glitter germ experiment in small groups as shown below:

For example, a metal spoon is durable and strong; a wooden spoon is also strong and has a high heat tolerance; a plastic spoon is flexible, durable, and cheap to make. You can use the metal spoon every day, the wooden spoon for cooking and the plastic spoon can be for a young child.

Some chairs are made from metal, which is long lasting and durable. Some chairs are made from plastic because it is cheap and durable. Some chairs are made from wood, which is strong and aesthetically pleasing.

Windows are made from glass because it is transparent and strong and can be moulded into shapes.

Children to complete the following sentences with their own material choice and a drawing:

To make a ruler, the best material is ______, because... To make a garden shed, the best material is ______, because... I would make a pencil pot out of ______ because... The best material(s) to make a drinking cup would be ______, because...

4. I can explain how the shapes of objects made from some materials can be changed.

Children are taught and reminded of the vocabulary of changing materials – see below image. Children asked to explain something they have recently changed the shape of – what was it and how did they change the shape? Can they use the vocabulary below to explain this change?



Children then investigate and record which changes they can make (if any) to a selection of objects shown in the image below – if they can twist it, what happens afterwards? Does the object remain twisted or go back to its original shape? Why do they think this? **Extension:** Children could group materials on if the change they make is permanent. How does this affect how the material could be used?



I can explain the process of recycling materials.



What is recycling?

5.

- Recycling is when we take materials that we were going to throw away and put them through a process so they can be reused again.
- Many things can be recycled such as paper, metal, plastic, glass, and electrical equipment.
- Recycling saves energy, is good for the environment, saves natural resources and saves space in landfills.

Show children the clip explaining recycling: Short Recycling Clip UK

What can be recycled?



The clothes that people wear to protect them from the rain are waterproof. Waterproof fabric was invented by a scientist called Charles Mackintosh. His invention was so important that raincoats are named after him!

Paper and Cardboard - such as newspaper and cardboard boxes

- Plastic such as yoghurt pots and milk bottles
- metal such as cans
- Glass such as bottles and jars
- Clothes such as jumpers and trousers
- Garden Waste such as grass cuttings
- Food such as apple cores and leftovers

How to Recycle

Different places in the United Kingdom use different systems for recycling but in Cornwall we use:

- Red bag for plastics
- Orange Bag for cardboard
- Blue Bag for paper
- Black box for glass and textiles

Our recycling is collected every two weeks.

Watch the following video clip showing how a young girl recycles at home: Girl shares her recycling experience Children create a poster encouraging recycling and explaining some of the key points shared in today's session.

6. I can tell you about the inventor John McAdam and the new process he invented.



John Loudon McAdam was born in Scotland on 21st September 1756 and was the youngest of 10 children.

When he was 14 his father died and John went to live with his uncle William, who was a merchant in New York. John also became a merchant and married Gloriana Nicoll.

In 1783, with his wife and two children, John McAdam moved back to Scotland and bought Sauchrie, an estate in

John McAdam became interested in road building and experimented with using different materials.

Roads at the time were often muddy and dangerous. Others were cobbled and very bumpy to travel over.

John McAdam invented a new process called 'macadamisation', which created smooth hard roads.



Macadamisation was a success and roads were built in this way across the world. This photo shows the building of a macadam road in Maryland in 1823. In 1819 the Parliamentary Committee praised his work and the efficiency and economy of his methods. By 1923, seventy Road Trusts were consulting John McAdam and his 3 sons had moved from Scotland to help him. The term macadam road is not often used today.



John McAdam held patents on his methods, but they were so popular that they were not protected. Parliament eventually awarded him some money, although he was never fully compensated for his work, nor did he receive royalties.

Later in his life he was offered a knighthood, although he turned it down and passed the honour to his son.

John McAdam died in Moffat on November 26th in 1836.

Tar was later added to macadam roads to stabilise them. This became known as tarmacadam, which is as a now commonly known as tarmac.

 John McAdam
 Image: Comparison of the state and the sta

Charles Mackintosh was born in 1766 in Scotland. As a young man he worked as a clerk, keeping records and doing paperwork. He did not love this job though, and in his spare time he studied science. Charles left his job as a now commonly known as tarmac. clerk when he was 19. He started work manufacturing chemicals and experimented with ways to use chemicals to make new materials.

During one of his experiments, he found that rubber would dissolve into a liquid in naphtha, a product derived from coal tar that he was investigating. The dissolved liquid rubber was waterproof. Charles realised it could be used to make waterproof fabric for clothes. He painted the dissolved rubber onto a piece of woollen cloth and placed another piece of woollen cloth on top, so the rubber was sandwiched in the middle. Charles had invented waterproof fabric! He started to use this fabric to make waterproof coats that he called Mackintoshes.

After the research and discussion, complete the raincoat investigation as shown below:



Materials are chosen for particular uses based on their properties. Charles Mackintosh created a fabric that was waterproof and flexible, so it could be used to make clothes.

A sheet of tinfoil is made from aluminium. This is a waterproof metal. Why would this not be a good choice of material for a waterproof coat?

5. I can describe what Rachel Carson learnt about ocean habitats. I can investigate Rachel Carson's findings on water pollution.



Rachel Carson was an American scientist who studied the ocean and the environment. She was born in 1907 and died in 1964.

She was a great scientist and studied the ocean all her life. She used her research to write her book. In her book, 'The Sea Around Us', Rachel Carson described the habitats of the ocean. Scientists today still think her book was very important. Rachel was one of the first people to use some of the words and phrases that we use to describe the plants and animals in habitats, like 'ecosystem' and 'food chain'.

Rachel Carson described an ocean food chain, starting with tiny plants and animals called plankton. Many people had never heard of the idea of a food chain before and were fascinated by the way the animals were connected.



As Rachel studied the food chain of the oceans, she found some problems. She noticed that the water of the ocean had chemicals in it, and that the animals that lived in the ocean also had chemicals in their bodies. Rachel started to research where these chemicals had come from. She found out that pesticides used to kill insects on farms and in gardens had got into the ocean. She knew that these chemicals would be very harmful for the sea creatures.

Rachel decided to write another book about what she had found out. Her book was called 'Silent Spring'. At first, some people didn't believe what Rachel had discovered. However, other scientists soon started to find the same things that she had found, and people agreed with her. Her work led to better rules for the use of chemicals and pesticides, and the Environmental Protection Agency in the USA was set up to look at other dangers to the environment.

After researching and learning about Rachel Carson, undertake the water pollution investigation shown below in small groups:

	small groups:	
	Water Pollution Experiment 🤍 Water Pollution Experiment 😚	
	Rether Corron found that chemicals spraged on forms and gordens could get into the access. Next, place three small logs on the growthall to represent houses of doms. You are going to do an experiment to prove how this happens. Next, place three small logs on the growthall to represent houses of doms. Prest, you need to set up a small world in a trag, the growthall to represent houses of the regrowthant on the makes 6 half will create an bocsent hat the small. Next, place three small logs on the growthall to represent houses of the regrowthant on the makes 6 half will Then add some water to the trag, it will create an bocsent hat the small. Next of the make it row on the makes for the small world.	
	Water Pollution Experiment Image: that a former words to spray ha form with a protocole Stake now colour of sprakles over ha form to represent petiticitie.	
	Callect another water sample and place it in a clear container. What do you notice about this water sample? What do you notice about this water sample?	
	Jane Colden	As previous plus: • Materials Cardboard • Rubber • Squashing • Bending • Twisting • Stretching
Elizabeth Garrett Anderson		Examples: Wood – matches, telegraph poles Metal – coins, cans, cars Plastic – some spoons • John
	Louis Pasteur	Dunlop • Charles Macintosh • John McAdam
Vocabulary	Charles Mackintosh	
	Rachel Carson Recearch Source Achievements betanist dector busiene machintech waterpreef essan	
	Research, Source, Achievements, botanist, doctor, hygiene, mackintosh, waterproof, ocean habitats	

Year 2 Spring Term				
	Spring 1 st Half	Spring 2 nd Half		
Science (All NC subject content covered)	 Living Things and their Habitats, Part 1 Pupils should be taught 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. Working Scientifically (WS): During year 2, pupils should be taught to use the following practical scientific methods, processes, and skills through the teaching of the programme of study content:	Living Things and their Habitats, Part 2 Pupils should be taught 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. Working Scientifically (WS): During year 2, pupils should be taught to use the following practical scientific methods, processes, and skills through the teaching of the programme of study content: asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions. 		
WS opportunities	Observing over time Image: Comparative & Fair Image: Comparative & Grouping Image: Comparative & Grouping Image: Comparative & Grouping Image: Comparative & Grouping	Observing over time What minibeasts can I What minibeasts can I Image: Secondary Sources Are all microhabitats Is this microhabitat the same? Is this microhabitat Do all microhabitats know?		



4. MICRO-HABITATS: I can identify animals in their habitats.

Some habitats are very small; we call these microhabitats. A large habitat contains many microhabitats. A microhabitat can be as small as a fallen branch or the space under a stone.

Microhabitats and Minibeasts



A minibeast is a small creature like an insect, a worm, or a spider. Many different minibeasts live in many different microhabitats. They are suited to live in that microhabitat as they can find the food, water and shelter they need. Minibeasts help to keep the microhabitat healthy.

Microhabitats a	nd Minibeasts	Microhabitats and	Minibeasts		
Ant	Ants		Worms		
••	Ants massily live underground in big fumilies.	R.V. PROPAGE	Worms like to live asywhere there is soil.		
	There are lots of insects to eat underground	NO	They like to eat dead leaf matter and they need the soil to be moint.		
	Arits don't have ears. Ants hear by feeling vibrations in the ground through their feet.		Worma help to keep soil healthy by digging turnels that let air and water in.		
s and Minibeasts	Microhabitats	and Minibeasts			
pider	Lady	ybirds			
Spiders can live in just about any feabrat		During the summer lodybirds like to live in shrubs, branches and flowers.			
When the weather gets colder they have to find shelter		When the weather gets cold they hide in tree stumps, under rocks and under leaves.			
Their body colours help them to blend in and they build webs to oatch insects to ear.		Ladybirds huddle together to keep warm and hilbernate until apring			
n n huo	And And And And And And And And	Arts article a	Ants Worms Image: Specific		

WS: The children identify two different microhabitats, draw, and describe them and identify/count the minibeasts they find within them.

Microhabitats Enquiry - Survey



Children use their results to create simple pictogram charts.



Most people in Britain live in an urban habitat. Urban habitats are areas with lots of buildings for people to live and work in. Some of the living things in urban habitats are here because people have put them there. This includes trees, hedges and plants in parks and gardens, and our pets. There are also many living things that grow wild in urban habitats. These plants and animals have found ways to survive alongside all the people that live nearby. Flowering plants such as nettles, daisies, dandelions and buttercups grow in parks, gardens and hedges. They even grow in abandoned buildings and through cracks in concrete. 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. Most British woodlands are deciduous, which means the leaves fall off the trees in winter. The fallen leaves provide food and shelter for many creatures and rot into the soil, making it rich and full of nutrients. As well as the fallen leaves, there are shrubs, flowers and grasses beneath the trees. These provide a home for many insects and invertebrates like worms, slugs and snails. The fruit and seeds of the trees, and the small creatures that live among the leaves, provide food for many birds and small mammals such as bats, mice, squirrels, stoats and weasels. Bigger mammals such as badgers, foxes and deer are common in woodland. There are also beavers, otters, and wild boar, though these animals are less common.

Pond habitats:

A pond is a still body of fresh water. Some ponds are man-made and appear in parks and gardens; others are natural dips and hollows in the land that have filled up with water. Lots of plants and animals live in the water in ponds, and many more live nearby. 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 – Perranporth!

Because Britain is made up of islands it has a lot of 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.



Tropical Rainforests

The tropical rainforests are home to gigantic trees, colourful birds, millions of bright insects, and many different mammals. There are more trees in tropical rainforests than anywhere else in the world. These trees are home to lots of animals. Most of them live high in the branches where they can find food. Insects, small birds and frogs feed on the fruit, seeds and leaves, or other small creatures. Tree-living lizards, chameleons and snakes feed on smaller animals. Plant-eating mammals, such as flying squirrels, monkeys, and sloths, live in the forest canopy. Carnivores, such as jaguars and leopards, hunt in the trees to catch prey.



Deserts

Because there is such little water in the desert, not many living things can survive here. Animals and plants that live here are specially adapted to the harsh, dry conditions. Many desert plants have leaves that collect and store water. Since water is so scarce, most desert animals get their water from eating these plants, or from the blood and body tissues of their prey. Some animals, like kangaroos and lizards, live in burrows which do not get too hot or cold and have damp air inside. These animals stay in their burrows during the hot days, coming out at night to feed. Camels can drink large amounts of water at one time and can survive as long as two weeks without drinking. They have large spread-out feet that help them to walk on the soft sand.



WS – Children conduct some basic research into the key habitats described and discuss their findings in groups.

Local Habitat Map

What kind of habitat is it?	
Draw and label any animals you see.	
	-

Children complete a local habitat map and add in the animals and plants they saw – this can be repated for two or three more habitat locations – one for Perranporth Beach (if a visit is allowed), one for the environmental area – woodland/pond and one for the urban environment of Perranporth (if visit is allowed).

Plants and animals live in habitats that suit them. They have special features that help them to survive in their habitat. This is why animals that live in cold places have thick fur, and why animals that live in or near water are good swimmers.

6. I can identify how an animal is suited to its habitat. I can explain how living things in a habitat depend on each other.

Living things in a habitat **depend** on each other. This means they need each other to stay alive. Squirrels and oak trees are part of a woodland habitat.

Squirrels and Oak Trees - dependency

Food: Acorns are a squirrel's favourite food.

Safety: Living high in an oak tree gives squirrels protection from foxes and badgers and gives them a safe place to have babies.

Shelter: The oak tree protects the squirrel from the wind, cold and rain, and bigger animals. The oak tree needs the squirrel to **spread its seeds.** The squirrel collects lots of acorns and buries some to save for later. It carries them far away from the tree and hides them under the ground, away from other animals. Sometimes the squirrels forget to go and dig them up again. These acorns grow into new oak trees.

The oak tree and the squirrel depend on each other. This means they need each other to stay alive.





Growth Reproduction Excretion Nutrition

Nutrition is about **food.** All living things need food to survive. Food gives living things energy, which they use to carry out the other life processes, like moving and growing. Green plants make their own food using sunlight, water and air. Animals are not able make their own food.

Some animals get their food from eating **plants**. These animals are called **herbivores**.



Some animals get their food from eating other **animals**. These animals are called **carnivores**.



Some animals get their food from eating plants and animals. These animals are called omnivores.



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.



8.

The arrows in a food chain mean 'is eaten by' or 'gives energy to'.



	As previous plus: • Living • Dead • Never alive • Habitats • Microhabitats • Food • Food chain • Sun • Grass • Cow • Human • Alive • Healthy	
Vocabulary		

	Year 2 Summer 1	lerm	
	Summer 1 st Half	Summer 2 nd Half	
	Plants Pupils should be taught to: 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. Working Scientifically (WS):	Animals including Humans Pupils should be taught to:	
Science (All NC subject content covered)	During year 2, pupils should be taught to use the following practical scientific methods, processes, and skills through the teaching of the programme of study content: asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions.	Working Scientifically (WS): During year 2, pupils should be taught to use the following practical scientific methods, processes, and skills through the teaching of the programme of study content: • asking simple questions and recognising that they can be answered in different ways • observing closely, using simple equipment • performing simple tests • identifying and classifying • using their observations and ideas to suggest answers to questions • gathering and recording data to help in answering questions.	
WS opportunities	Ubserving over time I can use my investigative observations to record what plants need. Which conditions will cress grow best in, cold or warmth?	Observing over time I can match, sort and group young animals and their adults. Pattern Seeking What affect does exercise have on the body? What affer? What affect does exercise have on the body? Which activity will make my heart rate faster?	
Key questions / knowledge and understanding to be explained Key Knowledge and facts to be recalled	 What do we know now? Children create a mind-map or complete a KWL grid on their knowledge of plants – they can draw pictures and label with words. I can look closely at plants and trees and record what I see. Before undertaking observational walk, refresh children's memory of plant from Year 1 learning and identify common plants they may see on walk: 	 animal is? What animal groups are there, and which animals fit in them? Which animal group do humans belong to? 2. I can match, sort and group young animals and their adults. 	





Every single seed has the beginnings of a new plant inside it, along with a little store of food to help it grow. When the conditions are right, the seed soaks up water and swells, and the tiny new plant bursts out of its shell. This is called **germination**.

Embryo: The tiny root and shoot which will grow into the adult plant.

Seed Coat: A tough outer covering. Food Store: A store of food for the young plant to use until it has grown enough to make its own food

Some plants grow first from a seed, and then develop a bulb that helps them to grow back year after year. A bulb lets the plant rest underground over the winter when it is too cold, then grow back later in the year when conditions are right.





Children learn that a life cycle is the sequence of changes that a living thing goes through as it grows into an adult. They are often shown in a circular image. The children are introduced to a range of lifecycles of animals from different classification groups:



The children identify similarities and differences between these lifecycles: For example, a lamb looks like its parent but a tadpole changes dramatically before becoming an adult frog. Children are introduced to **metamorphosis** in relation to the lifecycle of a butterfly – **they may have a caterpillar in metamorphosis in class for this purpose.**

All children then complete a lifecycle of a human and some complete lifecycles of other animals using the template sheets below:





The children will then plant a bulb and seed to compare the difference in growth. Seeds and bulbs need to wait for conditions to be just right before seeds can germinate and bulbs can sprout new growth.

As well as the seeds and bulbs, the children are going to plant some extra seeds and set up a comparative test. In the comparative test, they will plant the same seeds, and compare how they grow under different conditions.

Planting









Plants and trees are alive like humans and other animals. All living things do certain things to stay alive. These are called life processes. Animals, including humans, do these things. Plants do too, although they do them in different ways. Share the clip below with the children: https://www.bbc.co.uk/bitesize/clips/zyvs34j

- We then begin to crawl and move and start to feed on regular food.
- We start to walk (toddlers) and can communicate more.
- We grow taller and learn lots of new things (at school)
- Teenagers are very close to adults and are nearly fully independent from their parents.
- Adults are fully able to take care of themselves and can have babies of their own.

Children complete an ordering activity using the cut out sheet below, to show when things are likely to happen in a human lifecyle:



I can explain what all animals need to survive.

5.

Children learn that all animals have three basic needs to survive – air, food, and water. These are the things it must have to be able to live.

Children identify this regarding a range of animals and learn that there are some animals that may seem tricky, but they still need those three things. For example, fish:



Children learn that all animals need food, but the food they need differs from animal to animal. There are three broad groups of animals for the



All living things have a lifecycle and plants have these as well. Discuss the lifecycle of a bean plant:

Bean Plant Life Cycle



food they eat - carnivores (meat eaters), herbivores (plant eaters) and omnivores (eat both meat and plants).

Children the complete research to explain how to look after certain animals:

> Dear Kind Neighbours, I have been called away on important business. Please can you look after my pets? I have: a budgerigar called Pecksniff; • a chameleon called Charlotte; • and a stick insect called Slim. I will be away for one week. The key is in the envelope with this letter. I hope they all behave for you! Many thanks, Mrs Wilson at number 56



baby budgie need

What should a per budgie never eat?

a safe place

be looked after by its for the first

What does a pet

idaie eats

Word Bank

dults

You can cross off each word as you write it

babu

udgie eat



I can investigate the effects of exercise on the human body. 6. To grow into a healthy adult, we should try to eat the right types of food in the right amounts and **exercise**.

Whole class discussion



5. WS: I can use my investigative observations to record what plants Healthy Body, Healthy Mind slogan for PE. need.

Children observe closely their seed investigations – which plants have grown, and which haven't? Children to draw their observations and record 'height' where appropriate. What can they learn from this investigation on what plants need?

Plant Growth Test Results



Continue the process by looking at the two plants they planted:

T D		0		
Why should we	try to c	xerc	ise?	Г Ц
How much exerce try to do?	ise sho	uld 1		
1 Auf				T
Why is it import	ant Jor	ิ แร เ	0	
try to exercise?				
				_
How much exerc			and	

Children discuss and research with the teacher to find answers to these questions. We should exercise to keep our body and mind healthy. We should try to exercise every day, but this can be free form, such as playing tag or other games at break and lunchtime. Exercise keeps our heart healthy, but also keeps our mind healthy too. **Reference and discuss our Healthy Body, Healthy Mind slogan for PE.**

WS: Which activity will make my heart rate faster? Children predict using one of the sheets below:





Children conduct the investigation and record their results – children can explain orally which activities did/didn't make their heart rate faster? Why?

7. I can create a balanced meal plan and investigate why handwashing is important.

Humans need a balanced diet. This means that each day we should eat lots of different types of food, in the right amounts, to give us enough nutrients (the goodness found in food) to stay healthy. Humans should also drink plenty of water to keep their bodies **hydrated.**



The Eatwell guide splits our diet into five main groups:



• Fruit and vegetables should be eaten often – at least five portions per day

Carbohydrates provide energy.

Beans, pulses, fish, eggs and meat provide us with protein.

• Dairy and alternatives provide us with calcium to keep our bones and teeth healthy

Oils and spreads provide fats, which we need in small amounts.

Good hygiene:



Continue to monitor plant and seed growth and, if undertaken, identify that cress needs warmth to grow well – also explain that not all plants grow well in warmth and that some are adapted for colder climates.

What Do Plants Need?



Elicit that there are many plants that humans eat, including frutis, vegetables, grains and seeds. Play the clip below to elicit this process: https://www.youtube.com/watch?app=desktop&v=DpptaR-cGs0

Children observe their sunflower and narcissus plant. Encourage them to look closely at the leaves, the stem, and any buds or flowers. Think about how they have grown. Look at the height, the width, the colour, the shape and the texture of the plants.

Describe your plants to each other and listen carefully while they describe their plants to you.

Good hygiene is keeping ourselves and our environment (the places and things around us) clean to keep us, and others around us, healthy.



Complete the last section of the growth table:

Plant Growth Table

I can record and compare the growth of different plants.				
	Measure your plants with a ruler e	each week and reco	rd their heights in centimetres.	000
	Dwarf Sunflower		Paperwhite Narcissus	
Week 1				
Week 2			I	
Week 3				
Week 4				

Children use the data to create a bar chart of their results:



7. I can complete my mind-map or L section of my KWL grid, adding information I know after completing the topic.

Children could also complete the quiz at the end of the final week's PowerPoint to elicit their understanding and address any long-standing misconceptions.







	kemoving Germs
	 S. What do I know now? Children create a mind-map of all their learning over this topic, using pictures and words. Can they link or group any ideas together?
As provious plus: • Observe • Describe • Mature plants •	As previous plus: • Offspring • Grow • Adults Survival: •
As previous plus: • Observe • Describe • Mature plants • Suitable temperature / light / water • Germination • Growth • Grow healthy • Survival • Reproduction	As previous plus: • Onspring • Grow • Adults Survival: • Hygiene • Exercise • Food • Nutrition • Air / water • Reproduction and growth in animals Process of growth examples: • egg, chick, chicken; egg, caterpillar, pupa, butterfly; spawn, tadpole, frog; lamb, sheep. Growing into adults can include reference to baby, toddler, child, teenager, adult.