

Science at Meadows First School (Vision and Ethos)

The 5 principles of our curriculum are: *Unique Child, Positive Relationships, Key Knowledge & Skills, Love of Learning, Global Citizens* We embed these 5 principles within our Science Curriculum as follows:

We equip children with the **Science skills, vocabulary and knowledge** necessary for the next stage of their learning journey. Knowledge and skills are sequential and built upon to develop progress in **Science** across the school. Vocabulary development plays a vital role in this. We want children to be able to **use Science as a** means for communication and to use language skilfully. For example, children can form predictions and explain their reasoning using scientific vocabulary. Similarly, children will also be able to analyse and draw conclusions from experiments and investigations clearly and precisely.

The **Science** curriculum at Meadows supports the development of positive, respectful relationships. We encourage children to work together in **Science**, supporting and encouraging each other, **as well as reflecting on and critically evaluating each other's work**. We enable parents to support their children by involving them in their education and inviting them into school: **eg during STEM week children will be given projects to work on at home alongside their parents**. Life in 21st Century Britain can be busy and stressful and by allowing children time to be immersed in Science and explore the richness of the world around them can aid wellbeing and reduce stress. We know how to keep ourselves safe **in Science, using equipment carefully and safely**. We are proud of what we can achieve!

Our **theme-based, literature rich** curriculum embeds deep learning, ignites curiosity and broadens our children's awareness of cultural capital in **Science**, and **raises their Science capital**. Our children's interest in their local habitats are enhanced in various ways, such as collecting natural objects in the Forest school in Nursery, visiting farms in Reception and sensory walks throughout the seasons in year 1. Year 3 learn about working scientifically as they investigate rocks and soils, supported by the Lapworth Museum at the University of Birmingham. Throughout the year the school will have many visitors to help children think scientifically including local sustainable partners in Reception, the animal man in Year 1, and the dentist in year 3. We want children to develop a thirst for learning by using memorable and purposeful learning experiences. For example, every year the entire school will take part in STEM week. This week helps children to understand the real-life links between all the STEM subjects, raises their Science capital through making science relevant to their lives in the present, as well as inspiring children to become scientists by making science visible in their futures.

We want our children to use the vibrancy of our great country, to learn from other cultures, respect diversity, and appreciate what they have. We achieve this by providing a strong SMSC curriculum, with British Values and our core values placed at the heart of everything we do. This feeds into the **Science** curriculum

We want children to feel empowered to make a difference and affect changes as **global citizens** to their community and the world in which they live. **Children will learn about the harmful effects of global warming throughout their time at Meadows. They will learn how local and global habitats are under threat and how this affects the animals that live there. In every year group, children will undertake a community action project, following a sequence of learning, which enables the children to raise awareness of a real-life issue and see themselves making a positive impact to help.**

At Meadows First School we can all become **Scientists!** We develop the holistic child, acknowledging their unique needs and ensuring all children are able to access the **Science** curriculum. We support all of our children, with a range of equipment that caters for all needs. All of our children will have their Science work proudly displayed around the school and each year the whole school comes together to work on a single project during STEM week, at the end of which children will present their findings and investigations to the rest of the school.

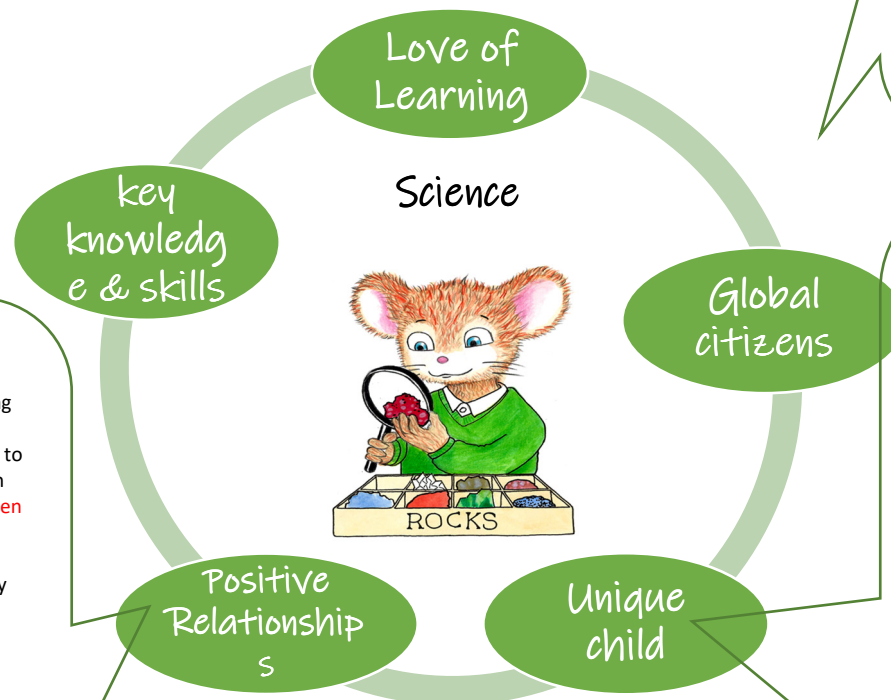
Children use Meadows Mouse to develop lifelong learning habits to be:

Enthusiastic: Asking questions about the world around them and coming up with ways of investigating their ideas.

Determined: We encourage a growth mindset, with high expectations, so children are **capable of understanding why an experiment may have gone wrong and knowing that this is a natural part of the scientific process**.

Focused: We want them to have no ceiling to their achievements and to grow up **wanting to be climatologists, geologists, astronauts and botanists**.

Organised: We aim for our children to be independent and confident to use equipment safely, as well as selecting the right equipment for the right piece of work.



YN		Marvellous Me	Let's Celebrate	Machines!	Wonderful World - Nature	wonderful World- People	Fantasy Fun
	<i>knowledge</i>	Animals including Humans Understand key features of the life cycle of an animal. Begin to understand their own life story and family history. Make healthy choices about food, drink, activity and toothbrushing.	Everyday materials Talk about what they see, using a wide vocabulary. Explore how things work. Talk about different forces they can feel.	Everyday materials Explore collections of materials similar and/or different properties. Talk about differences between materials, changes they notice.	Plants Plant seeds, care for growing plants. Understand key features of the life cycle of a plant.	Living things & their habitats Begin to respect and care for the natural environment and all living things. Talk about their environment. Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"	Seasonal Changes Describe what they see, hear, feel whilst outside Use all their senses in hands-on exploration of natural materials.
YR		Marvellous Me	Heroes	Around the world & beyond	Around the world & beyond	All creatures great & small	Once upon a tale
	<i>knowledge</i>	Plants Describe what they see, hear, feel outside. key features of the life cycle of a plant	Seasons Forest School - changing states of matter (ice, frost, water). Describe what they see, hear, feel whilst outside.	Everyday Materials Understand some important processes and changes in the natural world around them, including changing states of matter (EG ICE). Name and sort materials and describe their properties and uses.	Living things & their habitats & Plants Explore the natural world around them, making observations, drawing pictures of animals & plants. Growing plants from seeds. Forest School- new growth. Recognise some environments that are different to the one in which they live. Animals including Humans Understand key features of the life cycle of an animal. Sorting Animals. Know and understand different factors that support their overall health and wellbeing (healthy eating, sleep, screen limits, tooth brushing, exercise).		Seasonal Changes changing seasons. Describe what they see, hear, feel outside. Processes and changes in the natural world. Observe changes in plants' life cycle.
Y1		Making SENSE of our world	Memory box	Our Town, Bromsgrove	Animal Allsorts	Let's Explore Africa	Intrepid Explorers
	<i>knowledge</i>	Animals inc Humans label human body /senses identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Everyday Materials Identify/ name/ compare materials & properties distinguish between an object and the material from which it is made identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock	Seasonal changes observe changes across the 4 seasons observe and describe weather associated with the seasons and how day length varies	Animals inc Humans identify and name a variety of common animals including fish, amphibians, reptiles, birds mammals identify and name a variety of common animals that are carnivores, herbivores and omnivores describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)	Plants identify and name a variety of common wild and garden plants, including deciduous and evergreen trees identify & describe the basic structure of a variety of common flowering plants, including trees	
		Seasonal changes observe changes across the 4 seasons observe and describe weather associated with the seasons and how day length varies	Seasonal changes observe changes across the 4 seasons observe and describe weather associated with the seasons and how day length varies			Seasonal changes observe changes across the 4 seasons observe and describe weather associated with the seasons and how day length varies	
Y2		Seaside	FamousQueens	Around the world seas and continents	Castles	Hot and cold countries	Great Fire of London
	<i>knowledge</i>	Animals inc Humans describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene notice that animals, including humans, have offspring which grow into adults find out about & describe the basic needs of animals, incl humans, for survival (water, food and air)		Everyday Materials 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		Living Things & their Habitats compare the differences between things living, dead, never been alive? Identify different Habitats/ identify and name a variety of plants and animals in their habitats, including microhabitats 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	Plants 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
Y3	Theme	Stone Age to Iron Age	Village Settlers	Egyptians	Our local area	Plants and Roman Britain	European neighbours
	<i>knowledge</i>	Light 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	Animals inc Humans identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat; identify that humans and some	Forces & Magnets magnets attract or repel, poles compare how things move on different surfaces notice that some forces need contact between 2 objects, but magnetic forces can act at a distance observe how	Rocks and Soil compare and group together different kinds of rocks on the basis of their appearance and simple physical properties; describe in simple terms how	Plants 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	

		are ways to protect their eyes; recognise that shadows are formed when the light from a light source is blocked by an opaque object; find patterns in the way that the size of shadows change	other animals have skeletons and muscles for support, protection and movement	magnets attract or repel each other and attract some materials and not others compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials describe magnets as having 2 poles predict whether 2 magnets will attract or repel each other, depending on which poles are facing	fossils are formed when things that have lived are trapped within rock; recognise that soils are made from rocks and organic matter.		
Y4	Theme	Anglo Saxons	From Source to Sea	Rainforests of the World	The Tudors	Crime and Punishment	Moving on
	<i>knowledge</i>	Living Things & their Habitats 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	States of matter/ Materials compare and group materials together, according to whether they are solids, liquids or gases observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature	Animals inc Humans describe the simple functions of the basic parts of the digestive system in humans identify the different types of teeth in humans and their simple functions construct and interpret a variety of food chains, identifying producers, predators and prey		Electricity identify common appliances that run on electricity; construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit recognise some common conductors and insulators, and associate metals with being good conductors Sound identify how sounds are made, associating some of them with something vibrating recognise that vibrations from sounds travel through a medium to the ear find patterns between the pitch of a sound and features of the object that produced it find patterns between the volume of a sound and the strength of the vibrations that produced it recognise that sounds get fainter as the distance from the sound source increases	

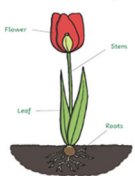
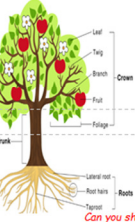
Working Scientifically	EYFS	Year 1	Year 2	Year 3	Year 4
1. Questioning and Enquiring 3-4 Use all their senses in hands-on exploration • Explore collections • Talk about what they see, using a wide vocabulary Explore and talk Talk about the differences		a) Ask simple questions about the world around us b) Begin to recognise that questions can be answered in different ways c) Use simple secondary resources to find answers.	a) Ask questions about the world around us. b) Recognise that they can be answered in different ways(changes over time, noticing patterns, grouping and classifying, comparative and fair tests, research). c) Find information using computers and books.	a) Ask some relevant questions and use different types of scientific enquiries to answer them. b) Begin to make decisions about which types of enquiry will be the best way of answering questions (observing over time, noticing patterns, grouping and classifying, fair tests, secondary sources). c) Begin to decide when and how to use secondary sources and carry out own research.	a) Ask increasingly relevant scientific questions and use different types of scientific enquiries to answer them. b) Make some decisions about which types of enquiry will be the best way of answering questions including observing changes over time, noticing patterns, grouping and classifying, carrying out simple comparative and fair tests, finding things out. c) They can decide when and how research will help and carry out research on their own.
2. Investigating, recording and reporting findings, drawing conclusions reception will: • Name/ describe. • Compare. • Recognise some similarities and differences • Explore the natural world around them. • Describe what they see, hear, feel. ELG Explore making observations, drawing pictures • Know some similarities and differences, drawing on their experiences and what has been read in class. • Understand some important processes and changes		a) Carry out simple tests with support. b) Begin to say what might happen in an investigation. c) Begin to say what happened in an investigation. d) Gather and record data with adult support e) Begin to record simple data. f) Begin to talk about what they have found out and how they found it out. g) Begin to say what happened in their investigation and whether they were surprised at the results or not.	a) Carry out simple tests Begin to make predictions and give a reason. b) Say what happened in an investigation. c) Gather and record data Record and communicate findings in a range of ways-use simple tables. Talk about what they have found out and how they found it out. d) To say what happened in my investigation and whether I was surprised at the results or not. e) To begin to say what they would change in their investigation.	a) Set up some simple, practical enquiries, comparative and fair tests. b) Begin to recognise when a fair test is necessary and help decide how to set it up. c) Make predictions with reasons. d) Gather, record and begin to classify data in a variety of ways. e) Begin to record findings using simple scientific language, drawings, labelled diagrams, bar charts and tables. f) Begin to use results to draw simple conclusions, make predictions, suggest improvements and raise further questions. g) With help, I can look for changes, patterns, similarities and differences in data. h) Begin to suggest how I could improve an investigation	a) Set up practical enquiries, comparative and fair tests. b) Recognise when a fair test is necessary and decide how to set it up. c) Make predictions drawing on previous experience and knowledge. d) Gather, record and classify data in a variety of ways. e) Record findings using simple scientific language, drawings, labelled diagrams, bar charts, keys and tables. f) Record on findings using oral and written explanations, displays or presentations. g) Use results to draw simple conclusions, make predictions, suggest improvements and raise further questions. h) Can spot patterns in results and look for changes, similarities and differences. i) Say what they have found out linking cause and effect. j) Suggest improvements to an investigation.

3. Observing, measuring and pattern seeking		<p>a) Talk about what that can see.</p> <p>b) Use simple equipment with support.</p>	<p>a) Observe closely using simple equipment.</p> <p>b) To observe changes over time with guidance and begin to notice patterns and relationships.</p> <p>c) To know how to use simple equipment safely.</p> <p>d) Use simple measurements and equipment (hand lenses, egg timers etc.) Begin to progress from non-standard units to mm cm ml l etc.</p>	<p>a) Begin to make systematic and careful observations and where appropriate, take accurate measurements using standard units using a range of equipment- e.g. thermometers, data loggers.</p> <p>b) Learn to use some new equipment- e.g. data loggers.</p> <p>c) Begin to measure accurately using standard units including time in mins and secs</p>	<p>a) Make systematic and careful observations and where appropriate, take accurate measurements using standard units using a range of equipment- e.g. thermometers, data loggers.</p> <p>b) Help make decisions about what observations to make, how long to make them for and the type of equipment that might be used.</p> <p>c) Can choose from a selection of equipment.</p>
4. Identifying, grouping and classifying		<p>a) Identify and classify with some support.</p> <p>b) Begin to observe and identify, compare and describe.</p> <p>c) With support, decide how to group objects and materials.</p>	<p>a) Identify and classify. Decide how to sort and group objects, materials and living things.</p>	<p>a) Begin to identify differences, similarities, or changes related to simple scientific ideas or processes.</p> <p>b) Begin to talk about criteria for grouping, sorting and classifying.</p> <p>c) Begin to compare and group according to behaviour or properties.</p>	<p>a) Identify similarities, differences or changes related to simple scientific ideas or processes.</p> <p>b) Talk about criteria for grouping, sorting and classifying and use simple keys.</p> <p>c) Compare and group according to behaviour or properties.</p>





Our knowledge organisers show the key knowledge, prior learning and possible misconceptions for each unit. They have been carefully matched to our sequences of learning for each term. Here are some examples of our KNOWLEDGE ORGANISERS in SCIENCE: (see also class pages on the website for each term's overview)

Meadows First School Knowledge Organiser Science (Understanding the World)									
Nursery Autumn 1 Theme: Marvellous Me: Animals									
Key knowledge	Key Vocabulary:								
<ul style="list-style-type: none"> Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. 	<table border="1"> <thead> <tr> <th>Word/ term</th><th>definition</th></tr> </thead> <tbody> <tr> <td>hatch</td><td>To come out of an egg</td></tr> <tr> <td>chrysalis</td><td>The hard, outer case of a pupa</td></tr> <tr> <td>duckling</td><td>A young duck</td></tr> </tbody> </table>	Word/ term	definition	hatch	To come out of an egg	chrysalis	The hard, outer case of a pupa	duckling	A young duck
Word/ term	definition								
hatch	To come out of an egg								
chrysalis	The hard, outer case of a pupa								
duckling	A young duck								
Key questions:									
Where do baby ducks/caterpillars come from?									
What is a baby duck/butterfly called?									
Key skills (working scientifically)	Future learning:								
Observing over time • How does the ... change over time? Researching using secondary sources • Find out more about the life cycles of the animals observed. Classification • Match animals and their young.	Recognise some environments that are different to the one in which they live. (Reception) • Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (Y1 - Animals, including humans) • Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 - Animals, including humans) • Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). (Y1 - Animals, including humans) MISCONCEPTIONS – some chn may think: <ul style="list-style-type: none"> all animals lay eggs • the young animal is fully formed inside an egg and just waiting to hatch • animals are assembled from body parts within the egg • all animal young are just small versions of the adult and get bigger animals such as cows and hens 'make' milk and lay eggs for us [humans] humans are not animals. 								

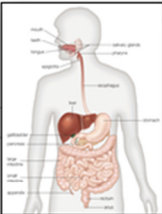

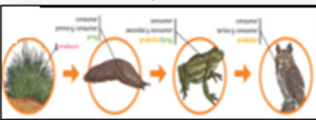


Meadows First School Knowledge Organiser		SCIENCE	Year 1 Summer	Focus: Let's Explore (Plants).												
Key Knowledge			Key Vocabulary													
<p>I can label the main parts of a plant.</p> 			<table><tr><td>Bulb</td><td>A root that grows into a flower or a plant.</td></tr><tr><td>Deciduous</td><td>A tree that loses its leaves in the Autumn every year.</td></tr><tr><td>Evergreen</td><td>A tree that has green leaves all year.</td></tr><tr><td>Plant</td><td>A living thing that grows in the earth and has a stem, leaves and roots.</td></tr><tr><td>Seed</td><td>The small, hard part from which a new plant will grow.</td></tr><tr><td>Tree</td><td>A tall plant that has a hard trunk, branches and leaves.</td></tr></table>		Bulb	A root that grows into a flower or a plant.	Deciduous	A tree that loses its leaves in the Autumn every year.	Evergreen	A tree that has green leaves all year.	Plant	A living thing that grows in the earth and has a stem, leaves and roots.	Seed	The small, hard part from which a new plant will grow.	Tree	A tall plant that has a hard trunk, branches and leaves.
Bulb	A root that grows into a flower or a plant.															
Deciduous	A tree that loses its leaves in the Autumn every year.															
Evergreen	A tree that has green leaves all year.															
Plant	A living thing that grows in the earth and has a stem, leaves and roots.															
Seed	The small, hard part from which a new plant will grow.															
Tree	A tall plant that has a hard trunk, branches and leaves.															
<p>I can label the main parts of a tree.</p> 			Working Scientifically <ul style="list-style-type: none">• We will ask questions about plants and think about how we can answer our questions.• We will go on a wild plant hunt! We will create a tally chart to show how many of each plant you have found and then use the information to answer questions.• We will plant seeds and observe changes as they begin to grow.• We will label the parts of a plant showing where the leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, and stems are.• We will talk about plants using common names. (tulips, daffodils, roses, blue-bells and daisies.)													
<p>I know that some common trees are horse chestnut, silver birch, holly.</p> <p>Can you show me the branches/trunk/leaves?</p> <p>Can you name a tree I might find outside our school?</p> <p>What do we mean by evergreen/deciduous trees?</p>			Prior learning <p>Children learn about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes. (Early Learning Goal)</p> <p>Common misconceptions: Some children may think:</p> <ul style="list-style-type: none">• plants are flowering plants grown in pots with coloured petals and leaves and a stem • trees are not plants • all leaves are green • all stems are green • a trunk is not a stem • blossom is not a flower.													



Meadows First School Knowledge Organiser			SCIENCE	Year 2 Spring 2	Focus: Materials
Key Knowledge				Key Vocabulary	
I can compare which materials would be best suited for particular uses.					
Material	Properties	Uses	Retrieval questions: Why is glass a good choice for making windows? (transparent, waterproof, hard) Which material would be a good choice for a wall? Why? (brick – strong & hard, opaque, waterproof) How could you change the shape of playground? (squash, stretch, bend, twist) Who was John Macadam? (invented tarmac making roads cheaper and more durable)		
Wood 	Hard, stiff, strong, opaque, can be carved into any shape.	Furniture, doors, sheds and floors.			
Metal 	Strong, hard, opaque, easy to wash, easy to polish, heavy.	Coins, cans, cars and cutlery.			
Glass 	Waterproof, transparent, hard, smooth, fragile.	Windows, glasses, bottles and jars.			
Fabric 	Soft, flexible, hard-wearing, stretchy, warm, absorbent.	Clothes, curtains, blankets and bags.			
I can find out how solid objects can be changed by squashing, bending, twisting and stretching.				Working Scientifically	
Squash an object by pushing both hands together.				<ul style="list-style-type: none">We will design and carry out an investigation into the strength of different materials. We will record our findings using simple equipment.We will compare and group different materials by looking at their properties.We will carry out an experiment on flexibility and discuss what we think will happen.With our investigations we will talk about whether our results surprised us.	
Bend an object by pulling both ends of the object and bringing the ends towards together.				Prior learning and misconceptions:	
Twist an object by turning your hands in opposite directions.				Distinguish between an object and the material from which it is made; identify and name a range of materials including wood, plastic, metal, glass, rock; describe the simple properties of these everyday materials; compare and group these on the basis of their physical properties (Y1 – Everyday Materials)	
Stretch an object by pulling your hands slowly and gently apart.				Misconceptions—some chn may think—only fabrics are materials only building materials are materials the word 'rock' describes an object rather than a material 'solid' is not her word for hard.	



Meadows First School Knowledge Organiser		SCIENCE	Year 4	Focus: Teeth and Digestion (animals including humans)									
Key Knowledge			Key Vocabulary										
I know the functions of basic parts of the digestive system.													
	<table><tr><td>oesophagus</td><td>A muscular tube that moves food from the mouth to the stomach.</td></tr><tr><td>stomach</td><td>An organ where food is broken down with stomach acid and movement.</td></tr><tr><td>Small intestine</td><td>An organ where nutrients are absorbed from food.</td></tr><tr><td>Large intestine</td><td>An organ where water is absorbed from waste food.</td></tr><tr><td>rectum</td><td>The organ where stools are stored before leaving the body through the anus.</td></tr></table>	oesophagus	A muscular tube that moves food from the mouth to the stomach.	stomach	An organ where food is broken down with stomach acid and movement.	Small intestine	An organ where nutrients are absorbed from food.	Large intestine	An organ where water is absorbed from waste food.	rectum	The organ where stools are stored before leaving the body through the anus.		
oesophagus	A muscular tube that moves food from the mouth to the stomach.												
stomach	An organ where food is broken down with stomach acid and movement.												
Small intestine	An organ where nutrients are absorbed from food.												
Large intestine	An organ where water is absorbed from waste food.												
rectum	The organ where stools are stored before leaving the body through the anus.												
Why do humans need to eat?													
I can identify different types of teeth and their functions. Why...													
do humans have different types of teeth?													
<table><tr><td>Canine</td><td>Tears and rips food.</td></tr><tr><td>Incisor</td><td>Bites and cuts food.</td></tr><tr><td>Molar</td><td>Grinds food.</td></tr><tr><td>Prec-molar</td><td>Holds and crushes food.</td></tr></table>	Canine	Tears and rips food.	Incisor	Bites and cuts food.	Molar	Grinds food.	Prec-molar	Holds and crushes food.					
Canine	Tears and rips food.												
Incisor	Bites and cuts food.												
Molar	Grinds food.												
Prec-molar	Holds and crushes food.												
I can construct and interpret a variety of different food chains.													
Which of these is the producer in this food chain?													
													
			Working Scientifically										
			<ul style="list-style-type: none">We will independently use different sources to research teeth.We will use everyday objects and materials to demonstrate the human digestive system. We will record our findings with written explanations and presentations.										
			Prior learning										
			<p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 - Animals, including humans)</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). (Y2 - Animals, including humans)</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. (Y2 - Animals, including humans)</p> <p>Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. (Y3 - Animals, including humans)</p>										
			MISCONCEPTIONS—some chn may think: <ul style="list-style-type: none">arrows in a food chains mean 'eats' • the death of one of the parts of a food chain or web has no, or limited, consequences on the rest of the chain • there is always plenty of food for wild animals • your stomach is where your belly button is • food is digested only in the stomach • when you have a meal, your food goes down one tube and your drink down another • the food you eat becomes "poo" and the drink becomes "wee".										

Science

Our Science curriculum provides the foundation for the understanding of the physical and biological aspects of the world. We use it as a bridge between many subjects, so that it contributes to a broad and balanced, rigorous, relevant and enjoyable curriculum.



We aim to encourage all of our children to build their Science Capital, so they see themselves as scientists and understand the relevance of Science. We provide them with opportunities to work scientifically, introduce them to famous historical and current scientists, and explicitly show how Science impacts on our world, to develop a sense of excitement and curiosity.



During lessons they will carry out a range of scientific enquiries that will help them to answer the questions they have about the world around them. In doing this, they will develop their skills of prediction, observing over time, pattern seeking, identifying, classifying, grouping, fair testing and drawing inference from evidence.

The Programmes of Study laid down in the National Curriculum, along with close liaison with schools in our pyramid and ongoing assessment, allow us to maintain continuity and progression across phases.