



# Hilton Lane Primary School Science MTP

AUTUMN 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7 – writing end point
Year 1 Animals incl. humans	Setting into year 1	<b>Introductory lesson</b> What is your body? What can your body do? Can you name any parts of your body and say what they are for? Animals – can you name and talk about different types of animals? WIK	To identify and label the basic parts of the human body.	To identify and name which part of the body is associated with each sense.	<u>Mammal</u> To describe and compare the structure of a variety of common animals.  Identifying and Classifying- - enquiry type. How could we classify mammals? Focus- Plan.  <i>asking simple questions and recognising they can be answered in different ways.</i>	<u>Bird</u> To describe and compare the structure of a variety of common animals.	<u>AUTUMN SEASONAL CHANGE WEEK</u> Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies. Observation over time- enquiry type. What does our school look like in the different seasons? Focus- Do  <i>observing closely, using simple equipment.</i>
Year 2 Animals incl. humans	<b>Introductory lesson</b> Can you name the different animal groups/types of animals? Can you name a carnivore/omnivore/herbivore? WIK Identifying and Classifying- Venn diagram revise skill. Focus- Do  <i>Identifying and classifying</i>	Notice that animals, including humans, have offspring which grow into adults.	Notice that animals, including humans, have offspring which grow into adults. Humans	Notice that animals, including humans, have offspring which grow into adults.  Life cycle- secondary sources. Focus- Review.	Find out and describe the basic needs of animals, including humans for survival (water, food and air)	<b>Writing midpoint</b> Poster about the basic needs of animals.	REVIST/ FREE LESSON



				<i>Gathering and recording data to help answering questions.</i>			
Year 3 Animals incl. humans	<b>Introductory lesson</b> Can you describe the basic needs of animals, including humans? Can you talk about how humans keep their body healthy? WIK	Identify that humans, need the right type and amount of nutrition.	Identify that animals need the right type and amount of nutrition and that they cannot make their own food; they get nutrition from what they eat.	Identify that animals need the right type and amount of nutrition and that they cannot make their own food; they get nutrition from what they eat. Research using secondary sources. Focus- Review. Collecting information on nutrition regarding cereal. Asking relevant questions and using different types of scientific enquiries to answer them.	Identify that animals need the right type and amount of nutrition and that they cannot make their own food; they get nutrition from what they eat. Research using primary sources. Focus- Do. Collecting information from different cereals. Sugar graph. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.	<b>Writing midpoint</b> Balance argument about different breakfasts. Focus- Review. Summarise findings from enquiry. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	REVIST/ FREE LESSON
Year 4	<b>Introductory lesson</b>	Construct and interpret a variety	Construct and interpret a variety	Identify the different types of	Teeth health.	Describe the simple function of	Describe the simple function of



<p>Animals incl. humans</p>	<p>What are the functions of the muscles and skeletons in animals and humans? Why do animals and humans need the right type of nutrition? What do humans, including animals need to survive? WIK</p>	<p>of food chains, identifying produces, predators and prey.</p>	<p>of food chains, identifying produces, predators and prey.</p>	<p>teeth in humans and their simple functions. <b>Writing end point</b> Make an information booklet about teeth.</p>	<p><b>Enquiry-observation over time.</b> <b>Focus- Review.</b> Teaching post-it note planning.  <i>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</i></p>	<p>the basic parts of the digestive system in humans.</p>	<p>the basic parts of the digestive system in humans.  <b>Enquiry-Research using secondary sources.</b> <b>Focus- Review (presentation)</b> <i>Reporting findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.</i></p>
<p>Year 5 Forces</p>	<p><b>Introductory lesson</b> What is a magnetic force? How does a magnet work? How do magnets attract or repel each other? WIKN</p>	<p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p>	<p>Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.</p>	<p>Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  <b>Enquiry- Pattern Seeking.</b> <b>Focus-plan</b> Paper Spinner (surface area impact.)</p>	<p>Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  <b>Enquiry- Pattern Seeking.</b> <b>Focus-review</b> Paper Spinner (surface area impact.)</p>	<p>Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p>	<p><b>Writing end point</b> Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.  Wallace and Gromit Cracking Contraptions.</p>



# Hilton Lane Primary School Science MTP

				<p>Teaching- post-it note planning, focus on variables.</p> <p>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p>	<p>Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other written presentations.</p> <p>Using test results to make predictions to set up further comparative and fair tests.</p>		<p>Design their own-instruction piece.</p>
<p>Year 6 Animals incl. humans</p>	<p><b>Introductory lesson</b> Why do humans need the right type of nutrition? How can people keep their body healthy? How do humans change as they develop to old age?</p>	<p>Identify and name the main parts of the human circulatory system.</p>	<p>Describe the function of the heart, blood vessels and blood.</p>	<p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p>	<p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>Planning- different enquiries (will likely be fair test). How can we test the impact of</p>	<p>Describe the ways in which nutrients and water are transported within animals including humans.</p>	<p><b>Writing end point</b></p>



# Hilton Lane Primary School Science MTP

					<p>exercise on our body's? <b>Focus-plan</b> Teach post-it note planning.</p> <p><i>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Using test results to make predictions to set up further comparative and fair tests.</i></p>		
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# Hilton Lane Primary School Science MTP

AUTUMN 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7 – writing end point
Year 1 Animals including humans	<u>Amphibian</u> To describe and compare the structure of a variety of common animals.	<u>Fish</u> To describe and compare the structure of a variety of common animals.	<u>Reptile</u> To describe and compare the structure of a variety of common animals.	<u>Classification- classify by animal group.</u> <u>Focus- Do, Review.</u>  How have we classified? What other ways can we classify?  <i>Identifying and classifying</i>	Identify and name a variety of common animals that are carnivores, herbivores and omnivores.  <u>Classification- Venn diagram teaching.</u>	<b>Writing end point</b> <u>Fact file- secondary sources.</u>  <i>Gathering and recording data to help answering questions.</i>	<u>WINTER SEASONAL CHANGE WEEK</u> Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies. <u>Observation over time- enquiry type. What does our school look like in the different seasons?</u> <u>Focus- Do</u>  <i>observing closely, using simple equipment.</i>
Year 2 Animals including humans	Describe the importance for humans of exercise.	<u>Enquiry into human exercise.</u> <u>Comparative testing.</u> <u>Focus- plan.</u> <i>asking simple questions and recognising they can be answered in different ways.</i>	<u>Complete exercise enquiry.</u> <u>Focus- review.</u> What does it show? What could we do next time?	Describe the importance for eating the right amounts of different types of food.	Describe the importance for humans of hygiene.  <u>Focus- plan.</u> Predict. <i>Gathering and recording data to help</i>	<b>Writing end point</b> Non-fiction leaflet about keeping the body healthy.	REVIST/ FREE LESSON



		<i>Performing simple tests. Gathering and recording data to help answering questions.</i>	<i>Table on whiteboards- maths skill. Stopwatch.</i>		<i>answering questions.</i>		
Year 3 Animals including humans	Recap- animal groups and their characteristics.	<i>Identify that humans and some other animals have skeletons for support, protection and movement.</i>	<i>Identify that humans and some other animals have skeletons for support, protection and movement.</i>  <i>Research using secondary sources.</i> <i>Focus- do.</i> <i>Recording annotated diagrams.</i>  <i>Recording findings using simple scientific language, drawings, labelled diagrams, keys,</i>	<i>Identify that humans and some other animals have muscles for support, protection and movement.</i>	<i>Identify that humans and some other animals have muscles for support, protection and movement.</i>  <i>Model building for muscles.</i>	<b>Writing end point</b> <i>Information leaflet about the purpose of muscles and skeletons for the doctor's surgery.</i>	<i>REVIST/ FREE LESSON</i>



			<i>bar charts and tables.</i>				
<p>Year 4 <i>Living things and their habitats</i></p>	<p><b>Introductory lesson</b> Can you name different groups of animals? How do different habitats provide for the basic needs of different animals and plants? What is a microhabitat?</p>	<p><i>Recognise that living things can be grouped in a variety of ways.</i></p>	<p><i>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</i></p> <p><b>Teach Classification keys.</b></p>	<p><i>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</i></p>	<p><i>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</i></p> <p><b>Identifying and Classifying.</b> <i>How can I classify these animals?</i> <b>Focus-plan, do.</b></p> <p><i>Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.</i></p>	<p><i>Recognise that environments can change and that this can sometimes pose dangers to living things.</i></p> <p><i>Enquiry- research using secondary sources.</i> <i>Focus- review.</i></p> <p><i>Report findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</i></p>	<p><b>Writing end point</b> <i>Recognise that environments can change and that this can sometimes pose dangers to living things.</i> <b>Write a poster to protect local wildlife.</b></p>
<p>Year 5 <i>Earth and space</i></p>	<p><b>Introductory lesson</b> <i>Introduction to space – naming and looking at the</i></p>	<p><i>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system</i></p>	<p><i>Describe the movement of the Moon relative to the Earth</i></p>	<p><i>Describe the Sun, Earth and moon as approximately spherical bodies</i></p>	<p><i>Use the idea of the Earth's rotation to explain day and night and the apparent</i></p>	<p><b>Writing end point</b> <i>Non-chronological report about the movement of the</i></p>	<p><i>REVIST/ FREE LESSON</i></p>



	<p><i>different planets in our solar system.</i></p>	<p><b>Research using Secondary Sources.</b> <b>Focus- Review</b> Galileo vs Capernicous</p> <p><i>Identifying scientific evidence that has been used to support or refute ideas or arguments.</i></p>			<p><i>movement of the sun across the sky</i></p>	<p><i>planets in the solar system.</i></p>	
<p>Year 6 Light</p>	<p><b>Introductory lesson</b> <i>How is a shadow formed?</i> <i>How does light travel?</i> <i>How is light reflected?</i> <i>What ways can you protect your eyes?</i> WIK</p>	<p><i>Recognise that light appears to travel in straight lines.</i></p>	<p><i>Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflects light into the eye.</i></p>	<p><i>Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.</i></p>	<p><i>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them</i></p>	<p><i>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them</i></p> <p><b>Pattern Seeking.</b> <b>Focus- Do.</b> <i>Does the angle of light source impact the size of the shadow formed?</i> <i>Taking measurements,</i></p>	<p>REVIST/ FREE LESSON <b>Writing end point</b></p>



# Hilton Lane Primary School Science MTP

						<i>using a range of scientific equipment, with increasing accuracy and precision, taking repeated readings where appropriate.</i>	
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# Hilton Lane Primary School Science MTP

SPRING 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7 – writing end point
Year 1 Plants	<b>Introductory lesson</b> What is a plant? What do plants need to grow? Are all plants the same? Can you name any parts of a plant?	Identify and describe the basic structure of a common flowering plants.	Identify and describe the basic structure of a variety of common flowering plants, including trees.	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees  <i>Tree hunt- What trees are at Hilton Lane? Secondary source- leaf classification key.            Focus- review            Using their observations and ideas to suggest answers to questions.</i>	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees	<b>Writing end point</b> <i>Non-chronological report on trees.            Secondary sources.            Focus- Do</i>	Revisit/ Free lesson
Year 2 Materials	<b>Introductory lesson</b> Can you name some different types of materials? Can you sort and describe different materials?  <i>Identifying and classifying</i>	Identify the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.  <i>Identifying and Classifying. Focus- plan. How can these be sorted? Why?</i>	Compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.  <i>Comparative test. Which material makes the parachute (or something similar</i>	Compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.  Complete last week's enquiry.	Find out how the shape of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.  <i>How to make a XXX? Model one shown, generate answers to the question of how we</i>	Find out how the shape of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	<b>Writing end point.</b> <b>How to make a XXX- instructions linked to English or topic.</b> <b>Using playdough/clay.</b>



		<p>asking simple questions and recognising they can be answered in different ways.</p>	<p>if link can be found to English text).  <b>Focus- Do, record.</b>  <i>Gathering and recording data to help answering questions. observing closely, using simple equipment.</i></p> <p><b>Maths skill- table on whiteboard.</b></p>		<p>could make it.  <b>Pattern Seeking.</b>  <b>Focus-plan</b>  <i>Using their observations and ideas to suggest answers to questions.</i></p>		
<p>Year 3 Light</p>	<p><b>Introductory lesson</b>  <i>What is a light source? Name a light source. What is light? What is dark?</i>  WIKN</p>	<p><i>Recognise that they need light in order to see things and that dark is the absence of light.</i></p>	<p><i>Notice that light is reflected from surfaces.</i></p>	<p><i>Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.</i></p> <p><b>Comparative test.</b>  <b>Focus-Plan (predict) and review.</b>  <i>UV bead enquiry. Setting up simple practical enquiries, comparative and fair tests. Using straightforward scientific evidence to answer questions or to support their findings.</i></p>	<p><i>Recognise that shadows are formed when the light from a light source is blocked by an opaque object.</i></p>	<p><i>Find patterns in the way that the size of shadows change.</i></p> <p><b>Observation over time.</b>  <b>Focus- Review.</b>  <i>How do shadows change across a day?</i></p> <p><i>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</i></p>	<p><b>Writing end point</b></p>



<p>Year 4 States of matter</p>	<p><b>Introductory lesson</b> What is a water cycle? Name a material. What happens when water is heated? How is water heated? What is temperature?</p>	<p>Compare and group materials together, according to whether they are solids, liquids, or gases.</p>	<p>Compare and group materials together, according to whether they are solids, liquids, or gases.</p>	<p>Observe that some materials change state when they are heated and measure or research the temperature at which this happens in degrees Celsius.</p> <p><b>Fair Testing</b> <b>Focus- Plan.</b></p> <p><b>Teach- how to read a thermometer.</b></p> <p>Suggestion- do different chocolates have different melting points?</p> <p>Asking relevant questions and using different types of scientific enquiries to answer them.</p>	<p>Observe that some materials change state when they are heated and measure or research the temperature at which this happens in degrees Celsius.</p> <p>Complete last week's enquiry. <b>Focus- Do.</b></p> <p>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p>	<p>Observe that some materials change state when they are cooled and measure or research the temperature at which this happens in degrees Celsius.</p>	
<p>Year 5 Animals incl. humans</p>	<p><b>Introductory lesson</b> What is a food chain? Can you describe the digestive system in humans? What are</p>	<p>Describe the changes as humans develop to old age. (Human growth)</p>	<p>Describe the changes as humans develop to old age. (Human growth)</p>	<p>Describe the changes as humans develop to old age. (Gestation of humans and other animals)</p>	<p>Describe the changes as humans develop to old age. (Puberty)</p>	<p><b>Writing end point</b> <b>Research using secondary sources.</b> <b>Focus- Review.</b> When is old age?</p>	<p>REVIST/ FREE LESSON</p>



	the names/function of teeth in humans?		<p><b>Research using Secondary Sources.</b> <b>Focus- Do.</b> Recording data and results of increasing complexity using scientific diagrams and labels classification keys, tables, scatter graphs, bar and line graphs.</p>				
Year 6 Electricity	<p><b>Introductory lesson</b> Can you name the different parts of a circuit? Can you explain the function of electrical components?</p>	<p>Use recognised symbols when representing a simple circuit in a diagram.</p> <p>Associate brightness of a lamp or volume of a buzzer with the number and voltage of cells used in the circuit</p>	<p>Associate brightness of a bulb with the number and voltage of cells used in the circuit</p> <p><b>Pattern Seeking.</b> <b>Focus- Do.</b></p> <p><b>Teach- measuring brightness- data logger.</b> How can we make the bulb brighter? Recording data and results of increasing complexity using scientific diagrams and labels classification keys, tables, scatter</p>	Associate the volume of a buzzer with the number and voltage of cells used in the circuit	Compare and give reasons for variation in how components functions, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches	<p><b>Writing end point</b> Write a set of instructions on how to make a burglar alarm.</p>	<p>REVIST/ FREE LESSON</p>



# Hilton Lane Primary School Science MTP

		<i>graphs, bar and line graphs.</i>				
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# Hilton Lane Primary School Science MTP

SPRING 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7 – writing end point
Year 1 Materials	<b>Introductory lesson</b> Can you name any different materials? Explore materials – do they look the same or different? How do they feel? WIK	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.  <b>Identifying and Classifying.</b> <b>Focus- Do</b> <i>Identifying and classifying</i>  <b>Venn Diagram-maths skill.</b>	Describe the simple physical properties of a variety of everyday materials.	Describe the simple physical properties of a variety of everyday materials.  <b>Identifying and Classifying.</b> <b>Focus- Plan</b> <i>How could you classifying the everyday materials?</i> <i>Identifying and classifying</i> <i>Asking simple questions and recognising they can be answered in different ways.</i>	Compare and group together a variety of everyday materials on the basis of their simple physical properties.	<b>Writing end point</b>  <b>Comparative test.</b> <i>Which material makes the best bear cave (or something similar if link can be found to English text).</i> <b>Focus- Do, record.</b>  <i>Performing simple tests.</i> <i>observing closely, using simple equipment.</i>	<b>SPRING SEASONAL CHANGE WEEK</b> Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies.  <b>Observation over time- enquiry type.</b> <i>What does our school look like in the different seasons?</i> <b>Focus- Do</b>  <i>observing closely, using simple equipment.</i>
Year 2 Plants	<b>Introductory lesson</b> Can you name a common plant? What is an evergreen tree? What is a deciduous tree?	Observe and describe how seeds grow into mature plants.  <b>Observation over time.</b> <b>Focus- Do</b>	Observe and describe how bulbs grow into mature plants.	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy  <b>Comparative test- different growth conditions.</b> <b>Focus- review.</b>	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	<b>Writing end point</b> Seed diary  <b>Observation over time.</b> <i>observing closely, using simple equipment.</i>	<b>REVIST/ FREE LESSON</b>



	What does a seed need to survive?	<i>observing closely, using simple equipment.</i>		<i>observing closely, using simple equipment. Using their observations and ideas to suggest answers to questions.</i>  <b>Growth measured using physical bar chart. 1cm cube for 1cm.</b>			
Year 3 Plants	<b>Introductory lesson</b> Can you describe the structure of plants? Can you describe the lifecycle of a plant? What do plants need to grow and stay healthy?	Identify and describe the functions of different parts of flowering plants; roots, stem/trunk, leaves and flowers.	Investigate the way in which water is transported within plants  <b>Enquiry- Comparative test.</b> Compare transport in flower vs celery. Compare the different colour patterns. <b>Focus- Do.</b> <i>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</i>	Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.  Practical pollination.	Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.  <b>Research using secondary sources.</b> <b>Focus- review.</b> How do seeds spread?  <i>Identifying differences, similarities or changes related to simple scientific ideas and processes.</i>	Explore the requirements of plants for life and growth (air, light, water, nutrients from the soils, and room to grow) and how they vary from plant to plant.	<b>Writing end point</b>  Information on seed dispersal.
Year 4 States of Matter	Revisit states from previous half term.	Identify the part play by	Identify the part play by evaporation and	Identify the part play by evaporation and			<b>Writing end point</b>



		<p>evaporation and condensation in the water cycle.</p>	<p>condensation in the water cycle and associate the rate of evaporation with temperature.</p> <p>Water Cycle in a bag.</p>	<p>condensation in the water cycle and associate the rate of evaporation with temperature.</p> <p><b>Observation over time</b> Exploring the rate of evaporation of a puddle. <b>Focus- do (recording)</b> Making careful and systematic observations and where appropriate taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p>			<p>Non-Chronological report on the water cycle. (Geography link)</p>
<p>Year 5 Living things and their habitats</p>	<p><b>Introductory lesson</b> How can you group plants/animals? Can you name some different groups of animals and plants? What is a food chain?</p>	<p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p>	<p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p><b>Research using secondary sources.</b> <b>Focus- do.</b> Create a lifecycle. <b>Focus- review.</b> Compare between 2 life cycles. Recording data and results of increasing complexity using scientific diagrams and labels classification keys, tables,</p>	<p>Describe the life process of reproduction in some animals.</p>	<p>Describe the life process of reproduction in some animals.</p>	<p>Describe the life process of reproduction in some plants.</p> <p><b>Flower dissection</b> (daffodils work well) NOT AN ENQUIRY. <b>Focus- Do.</b></p>	<p><b>Writing end point</b></p>



			<i>scatter graphs, bar and line graphs.</i>				
Year 6 <i>Living things and their habitats</i>	<b>Introductory lesson</b> <i>How can you group plants/animals? Can you name some different groups of animals and plants? How do plants/animals reproduce? Can you describe a life cycle of a mammal?</i>	<i>Describe how living things are classified into broad groups according to common observable characteristic and based on similarities or differences (Animals)</i>	<i>Describe how living things are classified into broad groups according to common observable characteristic and based on similarities or differences (Animals)</i>  <b>Identifying and classifying.</b> <b>Focus- plan</b>  <i>Planning different types of scientific enquiries to answer questions. Recording data and results of increasing complexity using scientific diagrams and labels classification keys, tables, scatter graphs, bar and line graphs.</i>	<i>Describe how living things are classified into broad groups according to common observable characteristic and based on similarities or differences (Plants)</i>	<i>Describe how living things are classified into broad groups according to common observable characteristic and based on similarities or differences (Microorganisms)</i>	<i>Give reasons for classifying plants and animals based of scientific characteristics.</i>  <b>Identifying and classifying.</b> <b>Focus- Review</b>  <i>Identifying scientific evidence that has been used to support or refute ideas or arguments.</i>	<b>Writing end point</b>



# Hilton Lane Primary School Science MTP

SUMMER 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7 – writing end point
Year 1 Seasons	<b>Introductory lesson</b> Can you name the seasons? What do you know about autumn/spring/winter? Revisit seasonal change weeks. What weather is associated w	<b>Autumn</b> Describe weather associated autumn and the day length.	<b>Winter</b> Describe weather associated winter and the day length.	<b>Spring</b> Describe weather associated spring and the day length.	<b>Writing mid-point</b> Pick a season and write a simple fact-file about it.  <b>Observation over time.</b> <b>Focus- review</b> Gathering and recording data to help answering questions.	REVIST/ FREE LESSON	REVIST/ FREE LESSON
Year 2 Living things and their habitats	<b>Introductory lesson</b> Can you name some different types of animals and plants? What do animals including humans need to survive? WIKN	Explore and compare the difference between things that are living, dead and things that have never been alive.  <b>Identifying and Classifying.</b> <b>Focus- Do.</b> Identifying and classifying	Explore and compare the difference 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.	Describe how different habitats provide for the basic needs of different kinds of animals and how they depend on each other.	Describe how different habitats provide for the basic needs of different kinds of animals and plants and how they depend on each other.	<b>Writing mid-point</b>
Year 3 Rocks	<b>Introductory lesson</b> What is a rock? What is a property?	Compare and group together different kinds of rocks on the basis of their	Compare and group together different kinds of rocks on the basis of their	Describe in simple terms how fossils are formed when things	Describe in simple terms how fossils are formed when things	Recognise that soils are made from rocks and organic matter.	<b>Writing mid-point</b>



		appearance and simple physical properties.	appearance and simple physical properties.  Identifying and classifying. Focus- Do. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.	that have lived are trapped within rock.	that have lived are trapped within rock.  Not an enquiry. Focus- Review Using straightforward scientific evidence to answer questions or to support their findings.		
Year 4 Sound	<b>Introductory lesson</b> What is a sound? What is a volume? What is meant by a sound getting fainter?	Identify how sounds are made, associating some of them with something vibrating.	Recognise that vibrations from sounds travel through a medium to the ear.	Recognise that sounds get fainter as the distance from the sound source increases  Comparative/fair test Focus- Plan	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.  Pattern Seeking	<b>Writing end point</b>



				<p><i>Asking relevant questions and using different types of scientific enquiries to answer them.</i></p> <p><i>Setting up simple practical enquiries, comparative and fair tests.</i></p>		<p><b>Focus- Review</b></p> <p><i>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</i></p> <p><i>Identifying differences, similarities or changes related to simple scientific ideas and processes.</i></p>	
<p>Year 5</p> <p><i>Properties and changes of materials.</i></p>	<p><b>Introductory lesson</b></p>	<p><i>Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets.</i></p> <p><b>Identifying and classifying.</b></p> <p><b>Focus- reveiw</b></p>	<p><i>Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets.</i></p> <p><b>Comparative/fair testing.</b></p> <p><b>Focus- Plan</b></p>	<p><i>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</i></p> <p><b>Observation over time.</b></p> <p><b>Focus- review</b></p> <p><i>Planning different types of scientific enquiries to answer questions, including recognising and</i></p>	<p><i>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</i></p>	<p><i>Use knowledge of solids, liquids and gases to decide how mixtures might be separated including through filtering, sieving and evaporating.</i></p> <p><b>Pattern seeking</b></p> <p><b>Focus- do</b></p> <p><i>Recording data and results of increasing complexity using scientific diagrams and labels</i></p>	<p><b>Writing end point</b></p>



		<p>Why did you classify as you did?</p> <p><i>Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other written presentations.</i></p>	<p>Compare use of materials for a particular purpose, e.g. a bag.</p> <p><i>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeated readings where appropriate.</i></p>	<p><i>controlling variables where necessary.</i></p>		<p><i>classification keys, tables, scatter graphs, bar and line graphs.</i></p>	
<p>Year 6 Evolution and inheritance</p>	<p><b>Introductory lesson</b> Can you name some different groups of animals and plants? What is a fossil? How do humans change as they develop to old age? WIK</p>	<p>Recognise that living things have changed over time.</p>	<p>Recognise that living things have changed over time.</p>	<p>Recognise that fossils provide information about living things that inhabited the Earth millions of years ago.</p>	<p>Recognise that fossils provide information about living things that inhabited the Earth millions of years ago.</p> <p><b>Research using Secondary Sources.</b> <b>Focus- Review.</b></p>	<p><b>Writing mid-point</b></p>	<p>REVIST/ FREE LESSON</p>



# Hilton Lane Primary School Science MTP

					<i>Identifying scientific evidence that has been used to support or refute ideas or arguments.</i>		
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# Hilton Lane Primary School Science MTP

SUMMER 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7 – writing end point
Year 1 Seasons	<p><b>SUMMER SEASONAL CHANGE WEEK</b> Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies</p> <p>Observation over time-enquiry type. What does our school look like in the different seasons? Focus- Do</p> <p>observing closely, using simple equipment.</p>	<p><b>Spring</b> Describe weather associated spring and the day length.</p>	<p>Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies (Comparison of the 4 seasons)</p> <p>Focus- evaluate. Pattern Seeking-enquiry type. Use their results to summarise the changes. Using their observations and ideas to suggest answers to questions.</p>	<p><b>Writing end point</b> Link to revisited learning</p>	REVIST/ FREE LESSON	REVIST/ FREE LESSON	REVIST/ FREE LESSON
Year 2 Living things and their habitats	<p><b>Introductory lesson</b> Identify and name a variety of plants and animals in their habitats, including micro habitats</p>	<p>Identify and name a variety of plants and animals in their habitats, including micro habitats</p> <p>Identifying and classifying</p>	<p>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain and identify and name</p>	<p>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain and identify and name</p>	<b>Writing end point</b>	REVIST/ FREE LESSON	REVIST/ FREE LESSON



		<p><b>Focus- plan.</b>  <i>Identifying and classifying.          Using their observations and ideas to suggest answers to questions.</i></p>	<p>different sources of food.</p>	<p>different sources of food.</p> <p><b>Identifying and classifying</b>          Food chains  <b>Focus- do.</b>  <i>Using their observations and ideas to suggest answers to questions.</i></p>			
<p>Year 3          Forces</p>	<p><b>Introductory lesson</b>          What is a magnet?          What is a push?          What is a pull?          What ways can you move objects?</p>	<p>Compare how things move on different surfaces.</p>	<p>Notice that some forces need contact between two objects but magnetic forces can act at a distance.</p>	<p>Observe how magnets attract or repel each other and attract some materials and not others.</p>	<p>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.</p> <p><b>Identifying and classifying</b>  <b>Focus- Do.</b>  <i>Setting up simple practical enquiries.          Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.</i></p>	<p>Describe magnets as having two poles.          Predict whether two magnets will attract or repel each other depending on which poles are facing.</p> <p><b>Pattern Seeking</b>  <b>Focus- plan.</b>  <i>Asking relevant questions and using different types of scientific enquiries to answer them.</i></p>	<p><b>Writing end point</b></p>



<p>Year 4 Electricity</p>	<p><b>Introductory lesson</b> Do you know anything in your house that uses electricity to work? Identify common appliances that run on electricity WIK</p>	<p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p>	<p>Identify whether or not a lamp will light a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery</p>	<p>Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p>	<p>Recognise some common conductors and insulators and associate metals with being good conductors.</p> <p><b>Fair Testing.</b> <b>Focus- plan.</b> Will it conduct electricity? Asking relevant questions and using different types of scientific enquiries to answer them.</p>	<p>Recognise some common conductors and insulators and associate metals with being good conductors.</p> <p><b>Fair Testing.</b> <b>Focus- do.</b> Will it conduct electricity? Setting up simple practical enquiries, comparative and fair tests.</p> <p>Using straightforward scientific evidence to answer questions or to support their findings.</p>	<p><b>Writing end point</b></p>
<p>Year 5 Properties and changes of materials.</p>	<p><b>Introductory lesson</b> Use knowledge of solids, liquids and gases to decide how mixtures might be separated including through filtering, sieving and evaporating.</p>	<p>Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</p> <p><b>Comparative/fair testing.</b></p>	<p>Demonstrate that dissolving, mixing and changes of state are reversible changes</p>	<p>Demonstrate that dissolving, mixing and changes of state are reversible changes</p>	<p>Explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes</p>	<p>Explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p>	<p><b>Writing end point</b></p>



		<p>What should we make our carrier bags from? Eco link vs material properties.</p> <p>Focus- recprding and reporting. .</p> <p>Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other written presentations.</p>					
Year 6 Evolution and inheritance	Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.	Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.	Identify how animals are adapted to suit their environment in different ways.	Identify how plants are adapted to suit their environment in different ways.	Recognise that adaptation may lead to evolution.	<b>Writing end point</b>	REVIST/ FREE LESSON



# Hilton Lane Primary School Science MTP

			<p><i>Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other written presentations.</i></p> <p><i>Identifying scientific evidence that has been used to support or refute ideas or arguments.</i></p>				
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