


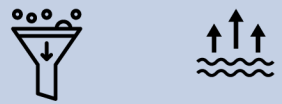








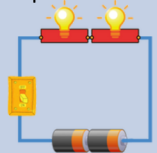



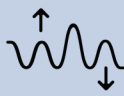


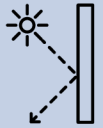



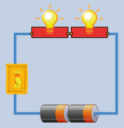






















MTP Science Autumn Humankind	Engages with Debate	Vocabulary	Objectives	Objectives	Scientific Enquiry	Scientific Enquiry
 <p>KS1 Animals including Humans and Seasonal Changes</p>	<p>How do humans survive?</p>	<p>Develop Adult Life cycle Offspring Survival Young Diet Disease Germs Nutrition Seasons Weather Daylight</p>	<p>Children know: AH4 That humans have offspring that grow into adults. AH5 The basic needs of a human for survival. AH6 That exercise, eating the right amounts of food and hygiene are important to stay healthy.</p> 	<p>Children know: SC1 The changes that take place throughout the seasons. SC2 The length of the day varies throughout the year. SC3 That the weather changes depending on the season.</p> 	<p>Can you stop a germ from spreading?</p> <p>SE5 Asking simple questions. Ask questions about germs and find out answers through books, the internet and testing. SE3 Perform simple tests. Set up a test where pupils have glitter mixed with washing up liquid on their hands and then get on with their lesson. Later on look for the glitter around the room.</p>	<p>SE4 Use their observations and ideas to suggest answers to questions. After looking at the amount of glitter everywhere come to conclusions about how germs spread.</p> 
 <p>LKS2 1st Half Term Rocks</p>	<p>What makes a rock valuable?</p>	<p>Igneous rock Sedimentary Metamorphic Magma Lava Sediment Permeable Impermeable Fossilisation Palaeontology Erosion</p>	<p>Children know: R1 That rocks can be grouped based on their appearance and physical properties. R1 That rocks can have value for a range of reasons</p>	<p>Children know: R2 That fossils are formed when things that have lived get trapped inside rocks. R3 Soils are made from rocks and organic matter.</p> 	 <p>Are all rocks as hard as each other? SE2 Create ways to test the hardness of different rocks E.g. sandpaper. SE4 Classify rocks based on their tests.</p>	<p>SE5 Record findings in their own way. SE6 Attempt to place rocks in order of hardness. SE7 Raise further questions from results such as the big question, do rocks stay the same forever?</p>
 <p>LKS2 2nd Half Term States of Matter</p>	<p>What makes water so special?</p>	 <p>States of matter Solids Liquids Gases Water vapour Melt Freeze Evaporate Condense Precipitation</p>	<p>Children know: SM1 They can group materials together into solids, liquids and gases. SM2 Some materials change state when they are heated or cooled and we can measure the temperature when the changes happen.</p>	<p>Children know: SM3 That as part of the water cycle, water evaporates and causes condensation and the rate that this happens is affected by the temperature.</p> 	<p>Do Materials have different melting points? SE2 Set up a test to find out the melting point of different materials. Test 3 different materials, ice, chocolate, butter. SE3 Predict then take the temperature of each melting point using a thermometer. SE4 Record the temperatures.</p>	<p>SE7 Children to think of other materials that might have similar melting points because they have similarities. e.g. lard/butter, ice cream/ice. SE8 Children look for similarities, differences and patterns in data. SE9 Children research the melting points of the materials that they suggested could have similar melting points.</p>





MTP Science Autumn Humankind	Engages with Debate	Vocabulary	Objectives	Objectives	Scientific Enquiry	Scientific Enquiry
 <p>UKS2</p> <p>Properties of Materials</p>	<p>How can we provide everyone with clean water?</p>	<p>Materials</p> <p>Solids</p> <p>Liquids</p> <p>Gases Melting</p> <p>Freezing</p> <p>Solution</p> <p>Reversible Changes of State</p> <p>Mixture</p> <p>Filtering</p> <p>Evaporating</p> <p>Condensing</p> <p>Conductor Insulator</p> <p>Transparency</p> <p>Solubility Magnetic</p>	 <p>Children know:</p> <p>PM1 How to group materials based on their properties (hardness, solubility, transparency, conductivity, response to magnets).</p> <p>PM4 The reasons why some materials are used for a particular purpose, based on evidence from tests.</p> <p>PM2 Some materials dissolve in liquid to form a solution and could recover a substance from a solution.</p>	 <p>Children know:</p> <p>PM5 That dissolving, mixing and changes of state are reversible and can demonstrate this.</p> <p>PM3 That mixtures can be separated through filtering, sieving and evaporating.</p> <p>PM6 Some changes result in the formation of new materials and this kind of change is not usually reversible e.g. burning.</p> 	 <p>Where would be the best place to put a solar still in the school grounds?</p> <p>SE1 Children set up 3 solar stills in different places in the school grounds. Think about the variables.</p> <p>SE2 Take regular measurements of the amount of purified water being formed in the solar stills.</p>	<p>SE3 Record their results using an appropriate graph.</p> <p>SE5 Use results to draw conclusions about where to put a solar still.</p> 




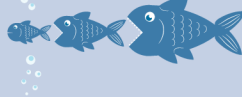
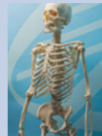


MTP Science Spring Inventions	Engages with Debate	Vocabulary	Objectives	Objectives	Scientific Enquiry	Scientific Enquiry
 <p>KS1</p> <p>Everyday Materials & Seasonal Changes</p>	 <p>Do risk takers become inventors?</p>	<p>Material Properties Suitability Smooth Bendy Waterproof Absorbent Transparent Opaque Squashing Bending Twisting Stretching Weather Seasons Spring Summer Autumn Winter Weather Daylight</p>	 <p>Children know:</p> <p>EM2 The names of a variety of materials that are used to make everyday items, including fabrics, elastic, plastic, metal, wood, paper, cardboard.</p> <p>EM1 Objects are made from different materials.</p> <p>EM4 Some materials can be changed by squashing, bending, twisting, stretching.</p> 	<p>Children know:</p> <p>EM3 Materials can be grouped based on their properties.</p> <p>EM6 Why certain materials have been chosen to make items.</p> <p>Children know:</p> <p>SC1 The changes that take place throughout the seasons.</p> <p>SC2 That the weather changes depending on the season.</p> <p>SC3 The length of the day varies throughout the year.</p>	<p>Your umbrella is made of glass is that a good idea?</p> <p>SE5 Ask simple questions and recognising they can be answered in different ways.</p> <p>Children ask questions about the strength and function of a chosen item to help them think about what qualities their material needs to have.</p>	<p>SE3 Perform simple tests. Test materials using different criteria to find the most suitable one for the job.</p> <p>SE6 Gathering and recording data to help in answering questions. Record how each material coped with each criteria to help them come to a conclusion.</p> 
 <p>LKS2 1st Half Term</p> <p>Electricity</p>	<p>Which is the most important: an insulator or a conductor?</p>	<p>Electricity Generate Renewable Non-renewable Appliances Battery Circuit Series Circuit Cell Wire Bulb Switches Buzzers Conductor Insulator</p>	 <p>Children know:</p> <p>E1 Common appliances that run on electricity.</p> <p>E2 How to construct a simple series electrical circuit and can identify and name the basic parts including cells, wires, bubs, switches and buzzers.</p>	<p>Children know:</p> <p>E3 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.</p> <p>E4 That a switch opens and closes a circuit and links this with whether or not a lamp lights in a simple series circuit.</p> <p>E5 Some common conductors and insulators and know that metals are good conductors.</p>	<p>Do all materials conduct electricity?</p> <p>SE2 Set up a comparative test. Children test different items in a circuit to see if they are conductors or insulators and use this to help them answer the question.</p> 	 <p>SE4 Test different materials in a circuit to see if they are conductors or insulators.</p> <p>SE5 Use a table and then a Venn diagram to show results.</p> <p>SE8 What similarities were there between all the conductors?</p> <p>SE7 Use their findings to help answer the BIG question.</p>






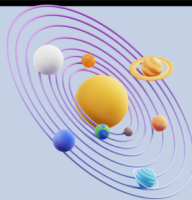
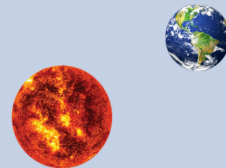



MTP Science Spring Inventions	Engages with Debate	Vocabulary	Objectives	Objectives	Scientific Enquiry	Scientific Enquiry
 LKS2 2nd Half Term Sound	 How do whales hear over long distance?	Vibration Soundwave Volume Amplitude Pitch Ear Particles Distance Soundproof Absorb Vacuum Eardrum	Children know: LS6 How sounds are made and that some of them come from vibrations. LS7 That vibrations from sounds travel through a medium to the ear. LS8 That there are patterns between the pitch of a sound and features of the object that produced it.	 Children know: LS9 That there are patterns between the volume of a sound and the strength of the vibrations. LS10 That sounds get fainter as the distance increases.	Can we change the pitch and volume of sounds? SE2 Set up a test to explore pitch. Put different amounts of water in bottles and blow across the top to hear the pitch. SE6 Children put the bottles in order of pitch and try to explain what they notice.	 SE8 Can they identify any patterns? SE9 Children use what they have learnt about sound to explain their findings.
 UKS2 1st Half Term Light	Does light only travel in straight lines?	Light source Reflection Incident ray Reflected ray The law of reflection Refraction Visible Spectrum Prism Shadow Transparent Translucent Opaque	Children know: L1 That light appears to travel in straight lines L2 How to apply the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. 	Children know: L3 That we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes. L4 How to apply the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	Can you make light bend? SE1 Set up an investigation to explore how mirrors allow light to travel round corners (plain, convex, concave). 	SE3 Attempt to make light move through a simple maze. SE5 Explain reasons for the placements of mirrors and use conclusions to help answer the big question
 UKS2 2nd Half Term Electricity	If electricity is so dangerous should we still use it?	Circuit Symbol Cell/battery Current Amps Voltage Resistance Electrons 	 Link to (RSHE) how to be safe around electricity Children know: E1 how to associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.	E2 Know how to compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches. E3 Use recognised symbols when representing a simple circuit in a diagram.	 Can you build a useful circuit? SE1 Children decide on the circuit they would like to make and make a plan. SE3 They draw their circuit using the correct symbols.	SE5 Make an advertisement to promote their electrical product. 

MTP Science Summer Legacy	Engages with Debate	Vocabulary	Objectives	Objectives	Scientific Enquiry	Scientific Enquiry
 <p>KS1</p> <p>Plants & Seasonal Changes</p>	 <p>Do big plants come from big seeds?</p>	<p>Wild plants Garden plants Weed Deciduous Seed Bulb Water Sunlight Temperature Nutrition Roots Stem Leaves Flowers Petals Fruit</p>	<p>Children know:</p> <p>P1 The names of different types of plants, including common wild and garden plants, deciduous and evergreen trees.</p> <p>P2 The basic structure of plants, including trees.</p> <p>P3 That seeds and bulbs have food stored inside them so they can begin to grow.</p> <p>P4 That most seeds and bulbs need water but not light to begin growing.</p> <p>P5 How seeds and bulbs grow into mature plants.</p>	<p>Children know:</p> <p>SC1 The changes that take place throughout the seasons.</p> <p>SC2 That the weather changes depending on the season.</p> <p>SC3 The length of the day varies throughout the year.</p> 	<p>Does the size of the seed affect the size of the plant?</p> <p>SE1 Observe closely, using simple equipment. Look closely at different plants in the environment.</p> <p>Cut up a plant to see what is inside.</p> <p>Look closely at a variety of seeds and bulbs.</p> <p>Watch plants grow from bulbs and seeds.</p> 	<p>SE2 Identify and classify. Group plants in different ways.</p> <p>Group seeds and bulbs.</p> <p>SE4 Use their observations and ideas to suggest answers to questions.</p> <p>Plant some bulbs and a selection of different seeds.</p> <p><i>What do children notice about them as they grow?</i></p> 
 <p>LKS2</p> <p>Living things & their habitat & Animals & Humans</p>	<p>What would happen if the sun stopped shining?</p>	<p>Organisms Life processes Respiration Sensitivity Reproduction Excretion Nutrition Habitat Extinct Environment Endangered species Classification Vertebrates Invertebrates Specimen Characteristic</p>	<p>Children know:</p> <p>LH1 That living things can be grouped in a variety of ways.</p> <p>LH2 That classification keys can help to group, identify and name a variety of living things in their local environment.</p> <p>LH3 That environments can change and that this can sometimes pose dangers to living things.</p>	 <p>Children know:</p> <p>AH1 Animals, including humans, cannot make their own food. They get their nutrition from what they eat.</p> <p>AH2 About simple food chains.</p> <p>AH2 How to identify producers, predators and prey.</p>	<p>Is Rendlesham Forest only home to squirrels and birds?</p> <p>SE2 Go on a trip to your chosen forest to look at all the different wildlife that live there.</p> <p>SE3 & 5 Document what you find at the forest through photographs, drawings etc.</p> 	<p>SE4 Group animals by where they live in the forest.</p> <p>SE6 Create a diorama (a 3d model of a landscape) showing the different layers of the forest and the animals that live in different places; on the forest floor, in the tree trunks, on top of the trees.</p> 





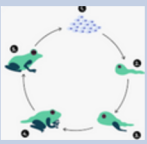
MTP Science Summer Legacy	Engages with Debate	Vocabulary	Objectives	Objectives	Scientific Enquiry	Scientific Enquiry
 <p>UKS2</p> <p>Evolution & Inheritance</p>	<p>Which is the camel's most important feature?</p>	<p>Offspring Inheritance Variations Characteristics Adaptation Habitat Environment Evolution Natural selection Fossil Adaptive traits Inherited traits</p>	<p>Children know:</p> <p>EH1 that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</p>  	<p>EH2 Know that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</p> <p>EH3 Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>	<p>Could animals from the Galapagos Island live anywhere else?</p> <p>SE1 Plan an enquiry to find out which animals live in the Galapagos Islands and their survival needs. Look at whether these animals live anywhere else.</p> <p>Have they adapted?</p>	 <p>SE5 Make conclusions about how these animals came to be on the Galapagos Islands and how they have adapted to environments.</p> <p>SE6 Back up theories using scientific evidence.</p> 
 <p>UKS2 YEAR 5</p> <p>Animals Including Humans</p>	<p>What happens to humans as they get older?</p>	<p>Fertilisation Reproduce Sexual -reproduction Life cycle Adolescence Puberty Menstruation</p>	<p>AH5 Describe the changes as humans develop to old age.</p> 	<p>AH6 Know about hygiene routines and changes to the body during puberty (hair, sweat glands, emotional wellbeing).</p>	<p>AH6 Know the importance of keeping clean and how to maintain hygiene Know how to keep safe on line and where to report concerns about your own or someone else's personal safety.</p>	<p>AH7 Name the main parts of the body including external genitalia (vulva, vagina, penis, testicles).</p>
 <p>UKS2 YEAR 6</p> <p>Animals Including Humans</p>	<p>What happens to humans as they get older?</p>	<p>Puberty Menstruation External genitalia Vulva Vagina Penis Testicle Human reproduction Conceive Hormones Online Safety</p>	<p>AH6 Know how puberty affects males (erections and wet dreams).</p> <p>AH6 Know about hygiene routines and changes to the body during puberty Including physical and emotional changes.</p>	 <p>AH7 Know the external genitalia and internal reproductive organs in males and females.</p>	<p>AH8 Know the changes in females (menstruation, menstrual cycle and menstrual wellbeing).</p>	 <p>AH9 Know how the process of puberty relates to human reproduction.</p> <p>AH10 know how babies are conceived and are born.</p>

MTP Science Summer Legacy		Vocabulary	Scientific Enquiry	Scientific Enquiry
 <p>UKS2</p> <p>Animals Including Humans</p>	<p>Are all mammals pregnant for the same length of time?</p>	<p>Fertilisation Prenatal Gestation Reproduce Asexual reproduction Sexual reproduction Life cycle Adolescence <i>Puberty</i> <i>Menstruation</i> Adulthood Life expectancy</p>	<p>How quickly does a human baby develop in the womb compared with different animals?</p> <p>SE2 Research online and record measurements of a baby and an animal at different stages of development.</p> <p>SE5 Present findings by creating a presentation.</p> 	<p>SE1 Plan which animal gestation periods to compare with a human.</p> <p>SE6 Use scientific research from the internet to get measurements and timings of different animals and babies.</p> 









MTP Science Autumn Conflict	Engages with Debate	Vocabulary	Objectives	Objectives	Scientific Enquiry	Scientific Enquiry
<p>KS1</p> <p>Materials</p>	<p>Were the "Three Little Pigs" good builders?</p>	<p>Object Material Hard Soft Stretchy Shiny Dull Rough Smooth</p>	<p>Children know: EM2 The names of different materials, including wood, metal, plastic, glass, stone, brick and can talk about how we use these materials in our world.</p> 	<p>EM5 About the similarities and differences, strengths and weaknesses of different materials and can group them based on these qualities. EM7 Buildings are built using a variety of materials.</p> 	<p>Which materials would improve the strength of a building? SE1 Observing closely using equipment Look closely at the different materials using equipment such as magnifying glasses.</p>	<p>SE2 Identify and classify. Group materials based on things such as their properties and best materials for building. SE3 Perform simple tests. Test the strength of different materials.</p>
 <p>LKS2</p> <p>Animals including Humans</p>	<p>What if your skeleton was made of a flexible material?</p>	<p>Vertebrate Invertebrate Muscles Tendons Joints Healthy Nutrients Energy Saturated fats Unsaturated fats Producer Predator Prey Herbivore Carnivore Omnivore Digest Oesophagus Stomach Rectum Small intestine Large intestine</p>	 <p>Children know: AH1 Animals, including humans, cannot make their own food. They get their nutrition from what they eat. AH2 Understand about simple food chains and can identify producers, predators and prey.</p>	<p>AH3 The basic parts of the digestive system in humans and can describe the functions of it. AH4 The different types of teeth humans have and their uses. AH5 Humans and some animals have skeletons and muscles for support, protection and movement.</p> 	 <p>What drinks cause the worst tooth decay? SE2 Place 5 boiled eggs in 5 different drinks and leave for a few days. Orange juice, milk, cola, apple juice, water. Discuss fair testing. SE3 Make daily observations and record in a table for 5 days.</p>	<p>SE5 Record findings using simple scientific language, drawings, labelled diagrams, keys, and tables. SE6 Make a poster to put up in school to make other children aware of the drinks that are good/bad for your teeth. SE7 Children could think about making a new drink that is not so bad for the teeth.</p> 

MTP Science Autumn Conflict	Engages with Debate	Vocabulary	Objectives	Objectives	Scientific Enquiry	Scientific Enquiry
 <p>UKS2 1st Half Term Forces</p>	<p>What would fall faster a stone or a piece of paper?</p>	<p>Forces Gravity Gravitational pull Weight Mass Friction Air resistance Water resistance Buoyancy Streamlined Mechanism Upthrust</p>	<p>Children know: F1 That unsupported objects fall towards Earth because of the force of gravity acting between Earth and the falling object. F2 The effects of air resistance, water resistance and friction, that act between moving surfaces.</p>	 <p>F3 Some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.</p>	<p>What would make the best parachute? SE1 Children plan to make and test 3 parachutes and decide on variables. SE2 Children drop parachutes and record measurements.</p> 	<p>SE3 Children record data and results on a graph. SE4 Use results to come to conclusions about what makes the best parachute.</p> 
 <p>UKS2 2nd Half Term Earth & Space</p>	<p>If the earth spins why aren't we dizzy?</p>	<p>Sun Star Moon Planet Sphere Spherical bodies Satellite Orbit Rotate Axis Geocentric model Heliocentric model Astronomer</p>	 <p>Children know: ES1 About the movement of the Earth and other planets relative to the sun in the solar system. ES2 About the movement of the moon relative to the Earth.</p>	 <p>ES3 The sun, Earth and moon are similar to a sphere shape. ES4 Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky</p>	 <p>How does the moon appear to change shape? SE1 Children keep a moon diary over a period of time (at least a couple of weeks) and then discuss their findings. SE3 Each night record the shape of the moon they see, what the weather conditions are like and the time of evening.</p>	 <p>SE4 Use the results to predict the next lunar cycle. SE6 Children use scientific evidence to help them understand that the moon does not change shape like their evidence suggests.</p> 

MTP Science Spring Planet Earth	Engages with Debate	Vocabulary	Objectives	Objectives	Scientific Enquiry	Scientific Enquiry
 <p>KS1</p> <p>Living Things & their Habitat & Animals & Humans</p>	<p>What would happen if all animals lived in the same place?</p>	<p>Amphibians Birds Fish Mammals Reptiles Living Dead Life processes Habitat Depend Carnivore Herbivore Omnivore Food chain Food sources</p>	<p>LH1 Know the differences between things that are living, dead and things that have never been alive. LH2 Know that animals live in habitats to which they are suited. LH3 Know how different habitats provide for the basic needs of different kinds of animals. LH4 Know how animals depend on each other. LH6 Know animals get their food from plants and other animals. LH7 Understand a simple food chain and identify and name different sources of food.</p>	<p>AH1 The names of common animals including fish, amphibians, reptiles, birds and mammals. AH2 The names of some common carnivores, herbivores and omnivores. AH3 Similarities and differences between different types of animals including pets. AH4 Animals have offspring that grow into adults.</p>	<p>Could the animals in the film Madagascar really live together? SE1 Observe closely Look closely at a range of different animals. SE2 Identifying and classifying Group animals based on different criteria – e.g. appearance, diet and habitat.</p> 	<p>SE4 Using their observations and ideas to suggest answers to questions. Answer the enquiry question giving reasons.</p>
 <p>LKS2 1st Half term</p> <p>Forces</p>	<p>What is the most surprising use of a magnet?</p>	 <p>Forces Friction Surface Magnet Magnetic Magnetic field Poles Repel Attract</p>	<p>Children know: F1 How things move on different surfaces. F2 That some forces need to touch but magnetic forces can act at a distance. F3 That magnets attract and repel each other and will attract some materials but not others. F4 The names of some magnetic materials.</p>	<p>F4 how to group together a variety of everyday materials based on whether they are attracted to a magnet. F5 Magnets have 2 poles. F6 Whether magnets will attract or repel each other based on which poles are facing.</p>	<p>Can we predict which objects will attract to a magnet? SE2 Test to see which materials/objects will prevent a paperclip being magnetised to a magnet. SE2 Test 10 different objects/materials. Place different materials between a magnet and a paperclip.</p>	<p>SE4 Predict then test each material/object and record in a table. Use a table to record results. SE8 What similarities/differences are there between the sorted materials?</p> 

MTP Science Spring Planet Earth	Engages with Debate	Vocabulary	Objectives	Objectives	Scientific Enquiry	Scientific Enquiry
 <p>LKS2 2nd Half Term Light</p>	<p>Is it ever really dark?</p>	<p>Light Dark Light source Reflection Reflect Reflective Ray Pupil Retina Shadow Opaque Translucent Transparent</p>	 <p>Children know: LS1 That they need light in order to see things and that dark is the absence of light. LS2 That light is reflected from surfaces.</p>	 LS3 Light from the sun can be dangerous but there are ways we can protect our eyes. LS4 Shadows are formed when light is blocked by an object. LS5 The size of shadows can change.	<p>Can the size of a shadow be changed? SE3 Measure the width or length of the shadow cast when a light source is at a range of distances. SE5 Record results in a table and then on a graph.</p>	<p>SE7 After getting a few results, children predict what the size of the next shadow will be. SE8 Use results to look for similarities, differences and patterns in data. SE3 Measure the size of the shadow cast when a light source is at a range of distances.</p>
<p>UKS2 Living Things & their Habitat</p>	<p>Would you rather live in a world with no plants or no animals?</p>	<p>Characteristics Classify Mammal Amphibian Insect Bird Taxonomist Key Bacteria Viruses Fungi Microorganism Microscope Species</p>	<p>Children know: LH1 The differences in the life cycles of a mammal, an amphibian, an insect and a bird. LH2 How some plants and animals reproduce.</p>	<p>LH3 That plants, animals and micro-organisms can be broadly grouped by their similarities and differences and observable characteristics.</p> 	<p>Can you create a classification key for some pond animals? SE1 Children to plan how to find out which creatures are in the pond.</p>	 <p>SE3 Use identification charts to identify and record the creatures they find in the pond. They then put them into their own classification key.</p>

MTP Science Summer Britain	Engages with Debate	Vocabulary	Objectives	Objectives	Scientific Enquiry	Scientific Enquiry
 <p>KS1 Living Things and their Habitats</p>	<p>Which plant is the most amazing of them all?</p>	<p>Environment Condition Climate change Adapt Germination Shoot Seed dispersal Micro Microhabitat</p>	<p>LH2 Know how a couple of plants have adapted to live in harsh environments (e.g. plants in the arctic have short roots because the ground is frozen).</p> <p>LH3 Know how different habitats provide for the basic needs of different kinds plants.</p> 	<p>LH5 know a variety of different plants including some from different environments i.e. the Arctic and the desert.</p> <p>LH5 know what a microhabitat is and can identify some in the local area</p> 	<p>What's the most unusual place you can grow a plant?</p> <p>SE3 Performing simple tests. Set up a simple test to find out what conditions are needed for a plant to grow. Include sand and bark. Also very hot and very cold temperatures.</p>	<p>SE4 Using their observations and ideas to suggest answers to questions. Making conclusions based on their test.</p> <p>SE5 Asking simple questions and recognising that they can be answered in different ways. Asking questions about what plants need to grow and thinking about how they will answer their questions.</p>
 <p>KS1 Animals & Humans</p>	<p>Which of our senses is the most important?</p>	<p>Senses Body Sight Hearing Taste Smell Touch</p>	<p>AH7 Know the names of the different parts of the body and demonstrate this by drawing and labelling them.</p> 	 <p>AH8 Know the 5 senses and which part of the body they link to</p>	<p>How far away can we hear noise?</p> <p>SE5 Asking simple questions Ask questions about the senses. Know how to find answers to their questions in a range of ways, e.g. internet, books, testing.</p> 	<p>SE3 Performing simple tests. Set up a simple test. Find the answer to a question by testing how far away they can hear noises. Record their results.</p> <p>SE4 Using their observations to suggest answers. Use their observations and test results to reach a conclusion.</p>
 <p>LKS2 Plants</p>	<p>If there were no leaves would plants still live?</p>	<p>Roots Stem Leaves Flowers Sunlight Water Nutrient Evaporation Fertilisation Petal Stamen Carpel Sepal Pollination Pollinator Germination Seed dispersal</p>	<p>P1 Know the names of different plants and can describe the functions of different parts of flowering plants: roots, stem/trunk, leaves, and flowers.</p> <p>P2 Know the things plants need for life and growth (air, light, water, nutrients from soil, and room to grow) and that these vary from plant to plant.</p> 	<p>P3 Know how water is transported in plants (through investigation).</p> <p>P4 Know that flowers are important in the lifecycle of flowering plants and can discuss pollination, seed formation and seed dispersal.</p> <p>P5 Know that plants make their own food. (They do not need to understand how yet.)</p>	<p>Can plants grow without soil?</p> <p>SE2 Plant the following plants in both soil and sand and monitor. A cactus, a tomato plant and cress.</p> <p>SE3 Observe the plants over a 4 week period. Decide on the variable to monitor. Amount of growth, colour etc.</p> <p>SE5 Make a series of observational drawings to show what is happening to the plants over the 4 weeks.</p> <p>SE7 Explain what happened to the plants and draw conclusions.</p> 	<p>How do plants transport water?</p> <p>SE2 place flowers in coloured water and observe the change in colour of the petals.</p> <p>SE2 Create an experiment to blend the colours to see if a flower will absorb the colours together i.e. blue and yellow dye - will the petals go green or some stay blue and some stay yellow.</p> <p>SE6 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p>

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 UKS2 1st Half term Animals Including Humans	Should we use cars for journeys of less than a mile?	circulatory system	AH1 Know how to identify and name the main parts of the circulatory system. 	AH2 Know how to describe the functions of the heart, blood vessels and blood.	AH3 Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.	AH4 Describe the ways in which nutrients and water are transported within animals, including humans.
 UKS2 YEAR 5 2nd Half term Animals Including Humans	What happens to humans as they get older?	Fertilisation Reproduce Sexual -reproduction Life cycle Adolescence Puberty Menstruation	 AH5 Describe the changes as humans develop to old age.	AH6 Know about hygiene routines and changes to the body during puberty (hair, sweat glands, emotional wellbeing).	 AH6 Know the importance of keeping clean and how to maintain hygiene. Know how to keep safe on line and where to report concerns about your own or someone else's personal safety.	AH7 Name the main parts of the body including external genitalia (vulva, vagina, penis, testicles).
 UKS2 YEAR 6 2nd Half term Animals Including Humans	What happens to humans as they get older?	Puberty Menstruation External genitalia Vulva Vagina Penis Testicle Human reproduction Conceive Hormones Online Safety	AH6 Know how puberty affects males (erections and wet dreams). AH6 Know about hygiene routines and changes to the body during puberty including physical and emotional changes.	AH7 Know the external genitalia and internal reproductive organs in males and females. 	AH8 Know the changes in females (menstruation, menstrual cycle and menstrual wellbeing).	AH9 Know how the process of puberty relates to human reproduction. AH10 Know how babies are conceived and are born 