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 Science Long Term Curriculum Plan 2023 - 2024



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
R	Light, Space, Electricity and Movement 		Objects and Materials 		Animals and Plants 	
1	Animals including Humans 		Weather and Seasons 	Plants 	Uses of Everyday Materials 	Senses 
2	Animals and their Habitats 	Materials 	Animals inc. Humans 	Healthy Living 	Plants 	
3	Animals inc. Humans 	Rocks 	Plants 		Forces and Magnets 	Light 
4	Electricity 	Sound 	States of Matter 		Animals inc. Humans 	Living Things and Their Habitats 
5	Animals inc. Humans 	Earth and Space 	Living Things and Their Habitats 	Properties and Changes of Materials 	Properties and Changes of Materials 	Forces <small>FORCE AND MOTION</small> 
6	Light 	Electricity 	Evolution and Inheritance 		Living Things and Their Habitats 	Animals inc. Humans 

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R	Autumn	Spring	Summer
	Light, Space, Electricity and Movement	Objects and Materials	Animals and Plants
Reception	<p>Lesson 1: What happens at night? WALT: use appropriate language to talk about what happens at night, including dark, light, the Sun, the Moon and stars.</p>	<p>Lesson 1: Who lives here? WALT: describe a range of homes and give reasons why different homes are suitable for the people who live there.</p>	<p>Lesson 1: What does an earthworm do? WALT: talk about their observations of earthworms and what they notice them doing</p>
	<p>Lesson 2: What is in the sky? WALT: name and describe a range of living and non-living things that are in the sky</p>	<p>Lesson 2: Which hat is best to wear today? WALT: give reasons why a particular hat is suitable for a particular type of weather, based on the observable simple properties of the material from which it is made.</p>	<p>Lesson 2: Who has stripes? WALT: talk about a range of familiar striped animals and start to suggest why the stripes may help to keep those animals safe.</p>
	<p>Lesson 3: What is the moon? WALT: describe the Moon's appearance and what an astronaut does</p>	<p>Lesson 3: What melts? WALT: name some materials that melt and describe what they observe during the melting process.</p>	<p>Lesson 3: What is inside an egg? WALT: identify some animals that lay eggs and talk about the young animals that hatch from them.</p>
	<p>Lesson 4: What makes it move? WALT: demonstrate how a push or a pull is needed to make an object move.</p>	<p>Lesson 4: What happens when you mix it? WALT: use comparative and descriptive language to talk about what they notice when they mix two or more materials together.</p>	<p>Lesson 4: What am I made of? WALT: name the main parts of their bodies, describe their functions and know what to do to look after themselves.</p>
	<p>Lesson 5: How does my toy work? WALT: demonstrate and describe, using the words 'push', 'pull' and 'twist', what they need to do to make a toy move.</p>	<p>Lesson 5: What goes through? WALT: talk about the size of an object, how it goes through a sieve and therefore how the sieve can be used to separate objects.</p>	<p>Lesson 5: Is all of a plant green? WALT: describe a range of familiar plants, including flowering and non-flowering species, naming and describing some simple features of these.</p>
	<p>Lesson 6: What floats? WALT: talk about objects that float and sink, referring to the size, shape and mass of the object, and what it is made from, and link this to their first-hand experience.</p>		<p>Lesson 6: Who are my parents? WALT: talk about and name several different animals, matching the young to the adult.</p>

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1	Autumn 1 Animals including Humans	Autumn 2	Spring 1 Weather and Seasons	Spring 2 Plants	Summer 1 Uses of Everyday Materials	Summer 2 Senses
Year 1	<p>Lesson 1: WHO'S WHO IN THE ANIMAL WORLD? WALT: identify and name a variety of common animals</p>	<p>Lesson 1: WHICH ANIMALS ARE BUSY AT NIGHT? WALT: describe how the lives of nocturnal animals differ from those of animals seen during the daytime</p>	<p>Lesson 1: HOW DO THE CHANGING SEASONS AFFECT ME? WALT: identify how the seasons determine how 'our changing world' varies, and to describe the impact that seasonal change has on our lives</p>	<p>Lesson 1: WHAT GARDEN PLANTS CAN WE FIND AROUND OUR SCHOOL? WALT: identify, name, describe and compare some familiar garden plants in the local environment</p>	<p>Lesson 1: WHAT MATERIAL IS THIS?: PART 1 WALT: identify and name three everyday materials</p>	<p>Lesson 1: IS EVERYONE'S BODY THE SAME? WALT: identify, name and compare parts of our bodies</p>
	<p>Lesson 2: HOW ARE ANIMALS' BODIES DIFFERENT? WALT: describe and compare the body structures of different kinds of animals</p>	<p>Lesson 2: WHICH ANIMALS LIVE IN OUR HOMES WITH US? WALT: identify, name and group the pets that children in our class have at home</p>	<p>Lesson 2: WHAT CAN WE SEE AND HEAR THAT SHOWS US THAT THE SEASONS ARE CHANGING?: PART 1 WALT: observe, describe and compare the changing seasons of the year</p>	<p>Lesson 2: WHAT WILD PLANTS CAN WE FIND AROUND OUR SCHOOL? WALT: identify, name, describe and compare a variety of familiar wild plants in the local environment</p>	<p>Lesson 2: WHAT MATERIAL IS THIS?: PART 2 WALT: identify and name three everyday materials</p>	<p>Lesson 2: WHAT DIFFERENCES CAN OUR TONGUES TASTE? WALT: describe, compare and group different edible materials by using the sense of taste</p>
	<p>Lesson 3: DO FISH HAVE FINGERS? WALT: describe and compare different kinds of fish</p>	<p>Lesson 3: WHO CARES FOR ANIMALS WHEN THEY'RE SICK? WALT: describe how an animal is cared for at an animal hospital or vet's surgery</p>	<p>Lesson 3: WHAT CAN WE SEE AND HEAR THAT SHOWS US THAT THE SEASONS ARE CHANGING?: PART 2 WALT: identify how 'our changing world' varies depending on the season by examining the evidence collected, and to describe the impact that seasonal change has on animals</p>	<p>Lesson 3: WHAT IS THE SAME AND DIFFERENT ABOUT THE FLOWERS AROUND US? WALT: compare a variety of familiar flowering plants and group them according to the similarities in their flowers</p>	<p>Lesson 3: IS ALL PAPER THE SAME WALT: identify and name paper in a variety of forms</p>	<p>Lesson 3: WHAT CAN WE HEAR USING OUR SENSE OF HEARING? WALT: identify, compare and group the sounds collected during a sound walk</p>

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	<p>Lesson 4: WHAT'S SO SPECIAL ABOUT BIRDS? WALT: observe the main features of birds, including feathers, and to compare these in different kinds of birds</p>	<p>Lesson 4: WHICH ANIMALS LIVE AROUND OUR SCHOOL? WALT: identify different animals seen around school at different times of the year</p>	<p>Lesson 4: HOW DOES THE WEATHER CHANGE ACROSS THE SEASONS? WALT: describe the weather and how it varies at different seasons of the year</p>	<p>Lesson 4: WHAT IS HAPPENING UNDERGROUND BENEATH OUR PLANTS? WALT: describe and compare the root systems of a variety of familiar plants</p>	<p>Lesson 4: IS ALL FABRIC THE SAME? WALT: identify and name a variety of fabrics</p>	<p>Lesson 4: HOW CAN WE EXPLORE THE WORLD USING OUR SENSE OF TOUCH? WALT: describe how our sense of touch helps us to learn about the world around us.</p>
	<p>Lesson 5: HOW DO DIFFERENT ANIMALS MOVE? WALT: describe and compare how different kinds of animals move</p>	<p>Lesson 5: HOW MANY BIRDS VISIT OUR BIRD FEEDING STATION? WALT: describe and identify birds that visit our bird feeders at different times</p>	<p>Lesson 5: WHAT DO DIFFERENT KINDS OF WEATHER LOOK AND FEEL LIKE? WALT: describe and compare weather associated with the seasons</p>	<p>Lesson 5: WHAT MAKES A TREE A TREE? WALT: identify and name, describe and compare a variety of trees in the local environment</p>	<p>Lesson 5: WHAT'S IT MADE OF? WALT: recognise that most objects are made from more than one material</p>	<p>Lesson 5: WHICH SMELLS DO WE LOVE AND HATE? WALT: describe and compare a variety of different smells, identifying which are the most and least liked by the class</p>
	<p>Lesson 6: WHOSE FOOD IS THIS? WALT: recognise that some animals mainly eat meat (carnivores), some only eat plant materials (herbivores) and some eat both (omnivores)</p>	<p>Lesson 6: HOW DO SNAILS CHANGE OVER TIME? WALT: describe the needs of snails and what happens as they change and grow.</p>			<p>Lesson 6: CAN THE SAME OBJECT BE MADE FROM DIFFERENT MATERIALS? WALT: describe how the same type of object can be made using different materials</p>	<p>Lesson 6: HOW DO WE USE OUR SENSES TO FIND OUT ABOUT THE WORLD AROUND US? WALT: describe how our senses help us to find out about the world</p>

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2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Animals and their Habitats	Materials	Animals inc. Humans	Healthy Living	Plants	
r 2	Lesson 1: WHAT LIVES IN A HABITAT? WALT: observe and identify what plants and animals live in different habitats	Lesson 1: CAN YOU DESCRIBE THE OBJECT? WALT: describe objects, including naming the material from which they are made	Lesson 1: WHAT DO BABIES NEED? WALT: recognise the needs of a human baby for survival	Lesson 1: HOW CAN WE SORT THIS FOOD? WALT: sort food into different types	Lesson 1: WHAT WILL THE SEEDS GROW INTO? WALT: identify which seeds will grow into which types of plants	Lesson 1: WHAT HAPPENS WHEN A SEED GERMINATES? WALT: describe the different stages of germination
	Lesson 2: HOW DOES A HABITAT CHANGE THROUGH THE YEAR? WALT: record changes in the number and types of animals found in a habitat during the year	Lesson 2: WHAT MATERIAL IS IT MADE OF? WALT: identify objects made of particular materials	Lesson 2: HOW HAVE WE CHANGED? WALT: compare features of a baby and a child	Lesson 2: WHAT FOOD SHOULD WE EAT? WALT: sort foods according to their food types	Lesson 2: WHAT DO GARDENERS NEED TO KNOW? WALT: ask questions that will help us to find out about growing plants from seeds	Lesson 2: DOES IT MATTER HOW WE PLANT THE SEEDS? WALT: write a conclusion that answers a question about how seeds should be planted
	Lesson 3: HOW DO THE ANIMALS IN A HABITAT DEPEND ON EACH OTHER? WALT: understand how animals depend on each other for food	Lesson 3: IS THAT A GOOD CHOICE OF MATERIAL? WALT: explain if a material is a good choice for an object	Lesson 3: HOW DO WE CHANGE THROUGHOUT OUR LIVES? WALT: classify and describe changes that happen as people grow older	Lesson 3: HOW CAN WE STAY FIT? WALT: observe the effects of exercise and plan for regular exercise	Lesson 3: HOW SHOULD WE PLANT THE SEEDS? WALT: plan and set up an investigation into how seeds should be planted	Lesson 3: HOW EXPERT ARE WE? WALT: produce a piece of information writing about how to grow plants from seeds
	Lesson 4: HOW DO ANIMALS CHANGE? WALT: observe how animals change over time	Lesson 4: WHICH MATERIALS ARE GOOD FOR A TODDLER'S PLAY DUNGAREES? WALT: test different fabrics to decide which is the best to use for dungarees.	Lesson 4: DO OLDER CHILDREN HAVE BIGGER HEADS? WALT: investigate whether older children have bigger heads	Lesson 4: HOW CAN WE STAY CLEAN? WALT: describe different ways to stay hygienic	Lesson 4: WHAT IS HAPPENING TO OUR SEEDS? WALT: make an accurate record of the changes that happen to our seeds	Lesson 4: WHAT DO PLANTS NEED TO GROW AND BE HEALTHY? WALT: identify what plants need for healthy growth
	Lesson 5: WHAT IS IN YOUR HABITAT? WALT: recognise and compare the main	Lesson 5: WHAT FABRIC WILL MAKE A BEDROOM DARK?	Lesson 5: WHAT CAN WE FIND OUT ABOUT BABIES?	Lesson 5: HOW CAN WE STAY HEALTHY? WALT: present information about	Lesson 5: HOW TALL WILL THEY GROW?	Lesson 5: WHAT CAN WE PLANT OUR SEEDS IN? WALT: plan a test to compare how seeds

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	components of some different habitats	WALT: test different fabrics to find out how much light passes through	WALT: find out and record the answers to questions about babies	staying healthy in a book for younger children	WALT: present data on a bar chart and use it to answer a question	germinate and grow on different materials
	Lesson 6: WHAT DO DIFFERENT ANIMALS EAT IN THEIR HABITATS? WALT: construct examples of food chains for a selection of habitats	Lesson 6: WHAT SHALL WE USE TO MAKE A TEABAG? WALT: test different materials to find out which is suitable for a teabag			Lesson 6: HOW CAN WE CARE FOR OUR PLANTS? WALT: decide how to improve the condition of an unhealthy plant	Lesson 6: DO SEEDS AND PLANTS NEED SOIL? WALT: decide whether seeds need soil in order to germinate and grow

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3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Animals inc. Humans	Rocks	Plants		Forces and Magnets	Light
Year 3	<p>Lesson 1: WHAT WOULD YOU NEED TO SURVIVE? WALT: identify the important things that need to be considered in order to survive</p>	<p>Lesson 1: WHAT DIFFERENT TYPES OF ROCK ARE THERE? WALT: examine different rocks in order to describe, compare and contrast their properties</p>	<p>Lesson 1: WHAT DO WE KNOW ABOUT PLANTS? WALT: describe what we know about the different parts of plants and to ask questions about plants for further investigation</p>	<p>Lesson 1: WHY DO PLANTS NEED STEMS? WALT: present information about the functions of the stem</p>	<p>Lesson 1: HOW CAN YOU MAKE IT START TO MOVE? WALT: explore how a force is required to make something start to move</p>	<p>Lesson 1: WHAT DO WE NEED TO SEE? WALT: explore how we need light to see things and why some things are easier to see than others</p>
	<p>Lesson 2: WHAT DO WE NEED TO EAT TO STAY HEALTHY? WALT: classify food and understand a balanced diet</p>	<p>Lesson 2: WHICH ROCK IS WHICH? WALT: sort rocks according to their properties using a key</p>	<p>Lesson 2: WHAT DO WE KNOW ABOUT LEAVES? WALT: make detailed observations of the similarities and differences in a variety of leaves, and relate these to the function of leaves</p>	<p>Lesson 2: WHERE DO NEW PLANTS COME FROM? WALT: name the main stages of a flowering plant's life cycle and present them in a sequenced diagram</p>	<p>Lesson 2: WHAT'S MAKING IT MOVE? WALT: explore how air can make things move</p>	<p>Lesson 2: WHICH IS THE SHINIEST? WALT: investigate how different objects reflect different amounts of light</p>
	<p>Lesson 3: HOW DOES AN ADVENTURER STAY HEALTHY? WALT: classify food and understand a balanced diet</p>	<p>Lesson 3: HOW ARE ROCKS USED AROUND OUR SCHOOL? WALT: recognise where and how rocks are used and explain how their properties make them suitable for their purpose</p>	<p>Lesson 3: WHAT WOULD HAPPEN IF A PLANT LOST ITS LEAVES? WALT: plan and set up a fair test investigation to find out the effect of removing the leaves from a growing plant</p>	<p>Lesson 3: WHAT DO FLOWERS HAVE IN COMMON? WALT: identify and compare the parts of flowers and describe their functions</p>	<p>Lesson 3: HOW WELL CAN AN OBJECT SLIDE ON DIFFERENT MATERIALS? WALT: explore how objects move on different materials</p>	<p>Lesson 3: HOW CAN WE MAKE THINGS EASIER TO SEE AT NIGHT? WALT: design and produce reflective strips for night safety</p>
	<p>Lesson 4: WHY DO WE HAVE A SKELETON? WALT: identify the similarities and differences between skeletons and explore their functions</p>	<p>Lesson 4: ARE ALL ROCKS AS HARD AS ONE ANOTHER? WALT: test and compare rocks to identify which is the hardest</p>	<p>Lesson 4: ARE ALL ROOTS THE SAME? WALT: describe in detail the similarities and differences in a variety of roots, and to relate</p>	<p>Lesson 4: WHAT DO BEES DO? WALT: describe and model the process of insect pollination</p>	<p>Lesson 4: WHICH MATERIALS ARE MAGNETIC? WALT: explore which materials are magnetic</p>	<p>Lesson 4: WHAT DO MIRRORS DO? WALT: explain how a mirror works and describe how images in mirrors may look 'different'</p>

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			these to the function of roots			
	<p>Lesson 5: CAN YOU DESIGN A NEW VERTEBRATE SPECIES? WALT: apply knowledge of skeletons to design a vertebrate and its skeleton</p>	<p>Lesson 5: ARE ALL ROCKS WATERPROOF? WALT: find out which rocks are waterproof</p>	<p>Lesson 5: WHERE DOES THE WATER GO? WALT: explain observations of water being transported in plants and make predictions based on observations</p>	<p>Lesson 5: HOW ARE SEEDS DISPERSED? WALT: demonstrate understanding of methods of seed dispersal by designing a seed</p>	<p>Lesson 5: WHAT CAN MAGNETS DO? WALT: measure the strength of a magnet in different ways</p>	<p>Lesson 5: HOW CAN I MAKE A SHADOW? WALT: identify how shadows are formed</p>
	<p>Lesson 6: HOW DO MUSCLES HELP US MOVE? WALT: identify different muscles in our body and what they do</p>	<p>Lesson 6: HOW DO ROCKS CHANGE OVER TIME? WALT: investigate how rocks change over time</p>			<p>Lesson 6: HOW STRONG ARE THE MAGNETS? WALT: carry out an investigation comparing the strength of different magnets</p>	<p>Lesson 6: CAN YOU CHANGE THE SHAPE OF A SHADOW? WALT: identify what affects the shape of a shadow</p>



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4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Electricity	Sound	States of Matter		Animals inc. Humans	Living Things and Their Habitats
4	Lesson 1: WHAT MAKES IT WORK? WALT: sort electrical products according to their power source	Lesson 1: WHAT DO WE KNOW ABOUT SOUNDS? WALT: describe what we know about sounds	Lesson 1: WHAT ARE MY PROPERTIES? WALT: classify materials as solids or liquids by observing their properties	Lesson 1: WHAT STATE AM I IN? WALT: classify materials as solids, liquids or gases	Lesson 1: WHAT DO WE KNOW ABOUT FOOD? WALT: share what we know about food and nutrition and to ask questions about what happens to food after it has been eaten	Lesson 1: WHAT IMPACT DO HUMANS HAVE LOCALLY? WALT: give examples of positive and negative ways in which humans change the environment
	Lesson 2: CAN YOU LIGHT THE BULB? WALT: make and record electric circuits	Lesson 2: HOW ARE SOUNDS MADE? WALT: explore different ways of making sounds	Lesson 2: WHAT HAPPENS TO THE ICE HANDS? WALT: plan a fair test investigation to test ideas about melting ice	Lesson 2: HOW CAN WE GET IT DRY? WALT: collect data to answer a question about drying washing and investigate evaporation	Lesson 2: WHERE DOES THE FOOD GO INSIDE YOUR BODY? WALT: investigate where our food goes after it has been eaten	Lesson 2: HOW CAN WE FIND OUT ABOUT LITTER? WALT: plan a litter survey
	Lesson 3: HOW DOES A CIRCUIT WORK? WALT: explain, using a model, how an electrical circuit works	Lesson 3: HOW DO SOUNDS TRAVEL? WALT: investigate how sounds travel	Lesson 3: WHAT MAKES A DIFFERENCE TO HOW FAST ICE MELTS? WALT: collect, present and interpret data about melting ice	Lesson 3: WHAT IS EVAPORATION? WALT: describe and explain findings from an evaporation investigation	Lesson 3: WHAT SORT OF TEETH DO WE HAVE? WALT: identify the different teeth that humans have	Lesson 3: WHAT TYPES OF LITTER ARE DROPPED LOCALLY? WALT: carry out a litter survey, collecting and presenting data
	Lesson 4: WHY DOESN'T IT WORK? WALT: identify and correct problems with circuits	Lesson 4: HOW CAN WE MAKE A SOUND LOUDER AND QUIETER? WALT: explore how we can make instruments louder and quieter	Lesson 4: WHAT ARE MELTING AND FREEZING? WALT: define melting and freezing	Lesson 4: WHAT IS BOILING? WALT: identify different materials from their boiling point	Lesson 4: WHY DO WE HAVE DIFFERENT TYPES OF TEETH? WALT: identify the different types teeth that humans have and understand their functions	Lesson 4: WHY DOES CLEARING LITTER MATTER? WALT: research and present information about the impact of litter on animals
	Lesson 5: WHAT DOES A SWITCH DO?	Lesson 5: HOW DO SOUNDS CHANGE AS WE MOVE AWAY FROM THE SOURCE?	Lesson 5: ARE SPACES REALLY EMPTY? WALT: explain observations of air using	Lesson 5: WHERE DID THE WATER COME FROM?	Lesson 5: HOW CAN WE LOOK AFTER OUR TEETH?	Lesson 5: WHAT HAPPENS WHEN A FOOD CHAIN IS BROKEN?

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	<p>WALT: describe what a switch does and how it works</p>	<p>WALT: measure how the loudness of a sound changes as the distance from the source increases</p>	<p>scientific knowledge about materials</p>	<p>WALT: identify where condensation is happening</p>	<p>WALT: recognise how to look after our teeth and explain its importance</p>	<p>WALT: demonstrate understanding of the potential human impact on food chains in a UK habitat</p>
	<p>Lesson 6: WHAT CAN WE USE INSTEAD OF WIRES? WALT: sort materials by testing for a property that makes them suited to replace a wire in a circuit</p>	<p>Lesson 6: HOW CAN WE CHANGE THE PITCH OF A PLUCKED NOTE? WALT: explore the different notes that plucked bands make and discover how to alter the pitch of a sound</p>			<p>Lesson 6: WHAT DO ANIMALS EAT? WALT: construct food chains and webs for a particular habitat</p>	<p>Lesson 6: WHAT IS THE IMPACT OF HABITAT DESTRUCTION IN OTHER PARTS OF THE WORLD? WALT: demonstrate an understanding of human impact on food chains and habitats in another part of the world</p>

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5	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Animals inc. Humans	Earth and Space	Living Things and Their Habitats	Properties and Changes of Materials	Properties and Changes of Materials	Forces
Year 5	<p>Lesson 1: WHAT IS A LIFE CYCLE? WALT: compare the life cycles of different animals</p>	<p>Lesson 1: WHAT'S IN SPACE? WALT: describe the shapes, positions and movement of the planets in the solar system and some of the differences between these and stars</p>	<p>Lesson 1: HOW DO FLOWERING PLANTS REPRODUCE? WALT: describe the process of sexual reproduction in many flowering plants, naming parts of the flower and explaining their importance within the process</p>	<p>Lesson 1: WHICH MATERIALS ARE USED IN OUR SCHOOL BUILDINGS, WHAT FOR AND WHY? WALT: recognise that materials are used in many different ways and for particular purposes within buildings</p>	<p>Lesson 1: HOW CAN WE SEPARATE MIXTURES? WALT: explain that materials can mix and to demonstrate that mixtures of solid materials can be separated by the technique of sieving</p>	<p>Lesson 1: HOW CAN WE MEASURE FORCES? WALT: measure, using appropriate units, friction between moving surfaces as part of an investigation into how the surface area and materials affect friction</p>
	<p>Lesson 2: WHAT DO WE KNOW ABOUT THE LIFE CYCLES OF MAMMALS? WALT: define what a mammal is and describe its life cycle</p>	<p>Lesson 2: WHAT IS A YEAR? WALT: use a model to describe and compare the movements of different planets in space</p>	<p>Lesson 2: ARE ALL FLOWERS ON ALL PLANTS THE SAME? WALT: recognise that flowers are not all the same and identify how they are different</p>	<p>Lesson 2: WEIGHTY PROBLEM: WHICH IS THE BEST CARRIER BAG? WALT: plan a fair test to investigate different carrier bags and collect evidence to make recommendations regarding their use</p>	<p>Lesson 2: WHAT HAPPENS WHEN WE MIX LIQUIDS AND SOLIDS? WALT: identify through investigation some solids that dissolve and others that do not, and describe how to tell that a solid has dissolved</p>	<p>Lesson 2: WHY DOES AN OBJECT FALL? WALT: use evidence to explain how objects fall through the air</p>
	<p>Lesson 3: WHAT DO WE KNOW ABOUT THE LIFE CYCLES OF AMPHIBIANS? WALT: define an amphibian and describe its life cycle</p>	<p>Lesson 3: WHAT IS A DAY? WALT: use a model or diagram to explain the effect of the Earth's rotation in space</p>	<p>Lesson 3: DO ALL PLANTS REPRODUCE BY PRODUCING SEEDS? WALT: describe how plants can reproduce asexually, by creating new plants from different parts of the parent plant rather than by producing seeds</p>	<p>Lesson 3: WHICH IS THE BEST TYPE OF PLATE TO USE? WALT: plan and carry out comparative tests to find out which material is best for picnic plates</p>	<p>Lesson 3: WHAT MAKES A DIFFERENCE TO HOW FAST SUGAR OR SALT DISSOLVES? WALT: identify, through investigation, some variables that affect the rate at which salt or sugar dissolves</p>	<p>Lesson 3: WHAT MAKES THINGS MOVE? WALT: use arrows to represent forces that make objects move in different directions</p>

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	<p>Lesson 4: WHAT DO WE KNOW ABOUT THE LIFE CYCLES OF INSECTS? WALT: define what insects are and describe the different types of life cycle, including the process of metamorphosis</p>	<p>Lesson 4: HOW DOES THE SUN HELP US TO MEASURE TIME? WALT: make a shadow clock and test its accuracy</p>	<p>Lesson 4: HOW DO AMPHIBIANS AND INSECTS REPRODUCE? WALT: describe the life process of reproduction in amphibians and most insects and recognise this process as sexual reproduction</p>	<p>Lesson 4: COOL BOX CONUNDRUM: CAN THE SAME CONTAINER KEEP COLD THINGS COLD AND HOT THINGS HOT? WALT: use evidence from investigations to explain how a cool bag works as an insulator</p>	<p>Lesson 4: HOW CAN WE GET DRINKABLE WATER FROM SEAWATER? WALT: explain the processes of evaporation and condensation and how these might help to produce drinkable water from a plentiful supply of seawater</p>	<p>Lesson 4: HOW CAN WE SLOW DOWN FALLING OBJECTS? WALT: use test results about air resistance as a starting point for further investigative work</p>
	<p>Lesson 5: WHAT DO WE KNOW ABOUT THE LIFE CYCLES OF BIRDS? WALT: define what a bird is and describe its life cycle</p>	<p>Lesson 5: WHAT TIME IS IT AROUND THE WORLD? WALT: use a model to explain why sunrise and sunset occur at different moments in time in different parts of the world</p>	<p>Lesson 5: HOW DOES THE HUMAN LIFE CYCLE COMPARE WITH THAT OF OTHER MAMMALS? WALT: recognise patterns in data about the life cycles of humans and other mammals</p>	<p>Lesson 5: MYSTERY MATERIAL: WHAT WILL HAPPEN IF WE ADD WATER TO THE MATERIAL? WALT: observe, measure, describe and explain the changes that happen to a mystery material when water is added</p>	<p>Lesson 5: HOW CAN WE PURIFY MATERIALS? WALT: demonstrate and explain how pure salt can be separated from a rock salt mixture, using techniques based on the properties of the materials involved</p>	<p>Lesson 5: DOES THE SHAPE OF AN OBJECT AFFECT ITS MOVEMENT IN A LIQUID? WALT: measure the effects of water resistance</p>
	<p>Lesson 6: WHAT MAKES A SUCCESSFUL LIFE CYCLE? WALT: create a life cycle for an imaginary animal that will help to ensure its long-term success</p>	<p>Lesson 6: WHY DO WE HAVE SEASONS? WALT: explain how the Earth's tilt leads to seasonal changes</p>			<p>Lesson 6: WHAT WILL HAPPEN IF WE ADD A SPRINKLE OF SALT TO A COMBINATION OF LIQUIDS? WALT: describe and explain observations of what happens to a sprinkle of salt as it is added to a mixture of lemonade and oil</p>	<p>Lesson 6: DO ALL HEAVY THINGS SINK? WALT: identify and explain the effect of up thrust on objects in water</p>

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6	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Light	Electricity	Evolution and Inheritance		Living Things and Their Habitats	Animals inc. Humans
Year 6	<p>Lesson 1: WHAT IS LIGHT AND WHAT DOES IT DO? WALT: consolidate the key ideas from Year 3 about the behaviour of light, including light sources and shadows</p>	<p>Lesson 1: HOW MANY SIMPLE CIRCUITS CAN YOU MAKE? WALT: represent a simple circuit in a diagram and describe how it works</p>	<p>Lesson 1: WHY DO LIVING THINGS VARY? WALT: identify ways in which living things of the same kind vary and to begin to think about why these variations exist</p>	<p>Lesson 1: HOW DO LIVING THINGS SURVIVE? WALT: explore ways in which living things are adapted to suit the environments in which they live and to help them survive</p>	<p>Lesson 1: CAN YOU SORT THIS MESS? WALT: demonstrate understanding of the process of classification</p>	<p>Lesson 1: WHAT DOES MY CIRCULATORY SYSTEM DO? WALT: describe how the human circulatory system works</p>
	<p>Lesson 2: CAN YOU SEE MORE THAN JUST YOUR FACE IN A MIRROR? WALT: describe how a mirror reflects an image of an object</p>	<p>Lesson 2: WHAT DOES A SWITCH DO? WALT: use a switch in a simple circuit, show it in a diagram and describe how it works</p>	<p>Lesson 2: CAN YOU BREED A DOG FOR A SPECIFIC PURPOSE? WALT: recognise how organisms can be bred to select particular characteristics in their offspring</p>	<p>Lesson 2: WHY DO LIVING THINGS BECOME EXTINCT? WALT: evaluate variables that contribute to the extinction of living things</p>	<p>Lesson 2: CAN YOU FACE THE GARDEN CENTRE CHALLENGE? WALT: apply the process of classification to plants</p>	<p>Lesson 2: WHAT IS A HEART AND WHAT DOES IT DO? WALT: investigate and describe the main functions of the heart</p>
	<p>Lesson 3: CAN LIGHT GO ROUND CORNERS? WALT: apply understanding of how light travels to explain how a periscope and other applications of mirrors work</p>	<p>Lesson 3: HOW STRONG IS YOUR RESISTANCE? WALT: demonstrate the effects of changing the current flowing through components in a circuit</p>	<p>Lesson 3: HOW CAN WE MAKE OUR FOOD BETTER? WALT: describe selective breeding and evaluate different people's opinions</p>	<p>Lesson 3: WHAT DOES IT TAKE TO SURVIVE? WALT: describe animal and plant adaptations and explain how the characteristics of the individuals in populations can change over time</p>	<p>Lesson 3: HOW ARE VERTEBRATES GROUPED TOGETHER? WALT: explore the classification of animals and recognise the main groups of vertebrates</p>	<p>Lesson 3: WHAT IS BLOOD? WALT: pose and answer a range of relevant questions about how blood transports gases round the body</p>
	<p>Lesson 4: CAN YOU MAKE A CAMERA WITH A BOX, PAPER AND A PIN?</p>	<p>Lesson 4: DO YOU KNOW YOUR CIRCUIT DIAGRAMS AND CAN YOU CONSTRUCT</p>	<p>Lesson 4: HOW DOES THE ENVIRONMENT AFFECT PLANTS? WALT: observe the effects of the</p>	<p>Lesson 4: WHAT EVIDENCE IS THERE THAT LIVING THINGS HAVE CHANGED OVER TIME?</p>	<p>Lesson 4: HOW ARE INVERTEBRATES GROUPED TOGETHER?</p>	<p>Lesson 4: WHAT IS IN BLOOD? WALT: identify the contents of blood and describe their function</p>

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	<p>WALT: understand how a pinhole camera works and, using suitable representations, show how this helps us to understand how we see things</p>	<p>WORKING CIRCUITS FROM THEM? WALT: demonstrate how circuits can be represented in, and constructed from, diagrams</p>	<p>environment on plants and design an experiment to investigate some of these effects</p>	<p>WALT: recognise that fossils allow us to study things that have lived in the past and provide evidence of evolution</p>	<p>WALT: explore the classification of the main groups of invertebrates</p>	
	<p>Lesson 5: HOW CAN YOU MEASURE A SHADOW? WALT: identify the variables that affect the size of a shadow, and plan a fair test to investigate one of them</p>	<p>Lesson 5: WILL THE LIGHTS STAY ON? (PART 1) WALT: research how electricity is generated and transmitted to the classroom, and discuss electricity generation in the future</p>	<p>Lesson 5: HOW DO ENVIRONMENTAL VARIABLES AFFECT PLANTS? WALT: investigate the effect of environmental variables on plants and interpret the results</p>	<p>Lesson 5: HOW DOES NATURAL SELECTION WORK? WALT: describe the process of natural selection</p>	<p>Lesson 5: WHERE DO THINGS FIT? WALT: apply classification concepts to living things in the school grounds</p>	<p>Lesson 5: WHAT DO VALVES AND BLOOD VESSELS DO? WALT: explain the function of valves, veins, arteries and capillaries in the human circulatory system</p>
	<p>Lesson 6: WHAT DO WE KNOW ABOUT CHANGING SHADOW SIZES? WALT: carry out a fair test to investigate the relationship between shadow size and an independent variable</p>	<p>Lesson 6: WILL THE LIGHTS STAY ON? (PART 2) WALT: present information on how electricity is generated and transmitted to the classroom, and to discuss its generation in the future</p>			<p>Lesson 6: WHAT ELSE IS LIVING BESIDES PLANTS AND ANIMALS? WALT: recognise that micro-organisms are groups of living things and explain what they are</p>	<p>Lesson 6: WHAT HAPPENS TO WATER IN OUR BODIES? WALT: explain how water helps humans' and other animals' bodies to function</p>