

***Science Curriculum Map Overview

Holly Class – EYFS/Y1					
Year A	Knowledge	Skills	Year B		
	Plants			Plants	
	<ul style="list-style-type: none"> • What do plants need to grow? Grow own potatoes – 4 groups – who will grow the most? • What plants can you name? • What trees can you name? • What parts of a plant / tree can you name? • Do all apples have the same number of seeds? – PS 	<ul style="list-style-type: none"> • Identify, observe and discuss similarities and differences in relation to plants and trees - ICG • Record own measurements e.g. using prepared tables, pictograms, tally charts and bar charts (record ‘potato growth’) - OOT, CFT • Record own observations e.g. using photographs, videos, drawings, labelled diagrams or in writing (label own plant & tree) • Use simple secondary sources (such as identification sheets, fans, outdoor boards and books) to name and compare plants and trees (flower and tree detectives!) - RSS 		<ul style="list-style-type: none"> • What do plants need to grow? Grow own potatoes & beans (magic beanstalks!). • What plants can you name? • What trees can you name? • What parts of a plant / tree can you name? • Which location will help the beanstalk to grow the tallest? Why? - CFT 	<ul style="list-style-type: none"> • Identify, observe and discuss similarities and differences in relation to plants and trees - ICG • Record own measurements e.g. using prepared tables, pictograms, tally charts and bar charts (record potato and beanstalk growth) - OOT, CFT • Record own observations e.g. using photographs, videos, drawings, labelled diagrams or in writing (label own plant & tree) • Use simple secondary sources (such as identification sheets, fans, outdoor boards and books) to name and compare plants and trees (flower and tree detectives!) – RSS
Animals, including humans		Animals, including humans			

	<ul style="list-style-type: none"> • Our body - What body parts can you name? • If you are the oldest are you the tallest? - PS • Local walk of Seend – What plants and animals can you see? • What are the 5 Senses? To share experiences i.e “I like to taste bread.” • Do animals have the same senses as humans? - RSS • Caring for living things - How should we care for pets? Pets to visit Holly Class • Changes over time - How have you changed since being a baby? - OOT • What can you do to be healthy? • Different types of animals (animal topic) - What facts do you know about animals? Where do different animals live? • What is the life cycle of a butterfly? • Where are dinosaurs now? What does the word extinct mean? Look at dinosaur species, physical features and diets. Which dinosaurs can you name? 	<ul style="list-style-type: none"> • Record own observations e.g. using photographs, videos, drawings, labelled diagrams or in writing (label template of a body) • Record measurements e.g. using prepared tables, pictograms, tally charts and bar charts (record height & age) - OOT, CFT, PS • Make observations of animals and discuss similarities and differences • Identify and name the senses and be able to ask and answer simple questions • Make careful observations to support identification, comparison and noticing change (pets, baby to now, growing our own butterflies, animals, dinosaurs) – OOT, ICG • Use own observations to compare living things • Sort and group (animals, dinosaurs, healthy and unhealthy foods) - ICG • Use simple secondary sources (such as identification sheets, fans, outdoor boards and books) to name and compare living things - RSS 	<ul style="list-style-type: none"> • Our body - What body parts can you name? • If you are the oldest are you the tallest? - PS • Local walk of Seend – What plants and animals can you see? * • What are the 5 Senses? To share experiences i.e “I like to taste bread.” • Do animals have the same senses as humans? • Caring for living things - How should we care for pets? Pets to visit Holly Class • Changes over time - How have you changed since being a baby? • What can you do to be healthy? • What is the life cycle of a butterfly? • Arctic and Antarctic - What animals live there? How do the animals stay warm? • Why do people feed birds more in the winter? Do bigger birds lay more eggs than smaller birds? – PS • Minibeast hunt! Trip: Butterfly World or Westonbirt Arboretum 	<ul style="list-style-type: none"> • Record own observations e.g. using photographs, videos, drawings, labelled diagrams or in writing (label template of a body, photograph, draw and label minibeasts, life cycles – human, butterfly) • Record measurements e.g. using prepared tables, pictograms, tally charts and bar charts (record height & age, number of minibeasts found) - OOT, CFT, PS • Make observations of pets & minibeasts (use of magnifying glasses) and discuss similarities and differences • Identify and name the senses and be able to ask and answer simple questions • Make careful observations to support identification, comparison and noticing change (pets, baby to now, growing our own butterflies, pets, minibeasts) – OOT, ICG • Sort and group (pets, minibeasts, healthy and unhealthy foods) - ICG • Shows care and concern for living things • Similarities and differences in relation to diet and physical
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		<ul style="list-style-type: none"> Describe the characteristics they used to identify a living thing Shows care and concern for living things Similarities and differences in relation to diet and physical features of animals and dinosaur - ICG Record own observations e.g. using photographs, videos, drawings, labelled diagrams or in writing (simple food chains & life cycles – human, butterfly, frog) 		<p>features of pets, minibeasts - ICG</p> <ul style="list-style-type: none"> Use simple secondary sources to compare different types of birds & minibeasts (outdoor bird & minibeast identification boards and fans- RSS)
Everyday materials		Everyday materials		
	<ul style="list-style-type: none"> How do we make bread? Children to make bread rolls – to observe process - link to Literacy (The Little Red Hen) + Harvest Materials - What materials can be used to make things? Which objects will be magnetic? Why? Float or sink? Why? How is ice made? Where will the ice melt the fastest? Why? 	<ul style="list-style-type: none"> Make careful observations to support noticing change: ingredients – dough – risen dough – bread roll - OOT liquid – solid – liquid - CFT) Similarities and differences in relation to different materials Ask and answer simple questions, make predictions and draw simple conclusions – CFT Make careful observations to support identification and comparison of different materials 	<ul style="list-style-type: none"> How do we make bread? Children to make bread rolls – to observe process - link to Literacy (The Little Red Hen) + Harvest Materials - What materials can be used to make things? Which materials will make the best boat? How is ice made? Where will the ice melt the fastest? Why? 	<ul style="list-style-type: none"> Make careful observations to support noticing change: ingredients – dough – risen dough – bread roll - OOT liquid – solid – liquid - CFT) Similarities and differences in relation to different materials Ask and answer simple questions, make predictions and draw simple conclusions – CFT Make careful observations to support identification and comparison of different materials

				<ul style="list-style-type: none"> Air-mazing air: Which bottle will make the rocket mouse fly the furthest? Why? 	<ul style="list-style-type: none"> Ask and answer simple questions, make predictions and draw simple conclusions – CFT, PS
	Seasonal Changes			Seasonal Changes	
	<ul style="list-style-type: none"> What are the four seasons? 	<ul style="list-style-type: none"> Make careful observations to support identification, comparison and noticing change (seasons, different types of weather) - OOT 		<ul style="list-style-type: none"> What are the four seasons? 	<ul style="list-style-type: none"> Make careful observations to support identification, comparison and noticing change (seasons, different types of weather) - OOT
	<ul style="list-style-type: none"> Sunlight: How are shadows made? Make Dinosaur shadows 	<ul style="list-style-type: none"> Talks about why things happens and how things work Record their measurements e.g. using prepared tables, pictograms, tally charts and bar charts (shadow length) – PS (Does the tallest dinosaur make the longest shadow?) 			

Oak Class – Y1/2

Working Scientifically:

- Observe closely (using equipment), over time (**Ob**)
- Classifying and grouping (**CG**)
- Pattern seeking (**PS**)
- Researching using secondary sources (**RSS**)
- Comparative and fair testing (**CFT**)

Year A	Knowledge	Skills	Year B	Knowledge	Skills
	Plants			Plants	

	<p>Enquiry: <i>What are plants and why are they so important ?</i> <i>What do plants need to grow and be healthy?</i></p> <ul style="list-style-type: none"> • Identify, name and describe a variety of common wild and garden plants including deciduous and evergreen trees. • Identify and describe the basic structure of a variety of common flowering plants including trees. • Observe and describe how seeds and bulbs grow into mature plants. • Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. 	<ul style="list-style-type: none"> • To recognise and identify some plants (Ob) (RSS) • To observe closely using all senses (Ob) • To describe observations and findings using some subject-specific vocabulary (eg Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, light, shade, sun, warm, cool, water, grow, healthy names of trees in the local area, names of garden and wild flowering plants in the local area) (Ob) • To sort living things using the skills of selecting, classifying and categorising (CG) • To compare and contrast in order to identify plants (CG) • To recall learnt information (RSS) <p>Investigating (CFT) What do plants need to grow?</p> <ul style="list-style-type: none"> • To begin to suggest ways in which we could find answers to questions • To carry out simple tests accurately and with care 		
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		<ul style="list-style-type: none">• To describe results and begin to attempt to explain them (PS)• To recognise surprises (PS)• To begin to understand that tests should be “fair”			
	Animals, including humans			Animals, including humans	

	<p><i>Light-touch all year:</i> Revision: animals in school grounds (habitats), as affected by weather and changing seasons (See Living Things and their habitats)</p>		<p>Enquiry: <i>Are humans like tigers? What do animals (including humans) need to stay alive and to be healthy? If all living things die, why are there still humans and other animals in the world?</i></p> <ul style="list-style-type: none"> • Identify and name a variety of animals from all five major groups (and some invertebrates) • Classify some animals as carnivores, herbivores or omnivores • Compare animals (including humans) making connections between the body parts of different animals e.g. knee joints, ears, front limbs (arms, legs, wings) • Name parts of the human body including parts associated with the senses • Know the life cycle of humans and some other animals (e.g. frog, fish, robin, lizard – and revise butterfly relating it to other insect life such as ants, beetles, flies) • Recognise basic needs of animal life (water, food, air) 	<ul style="list-style-type: none"> • To recognise and identify animals (Ob) (RSS) • To observe animals and pictures of animals closely using all senses (Ob) (RSS) • To describe observations and findings using some subject-specific vocabulary such as names of animals and parts of bodies (eg Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves AND offspring, reproduction, growth, child, young/old stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly) (Ob) (RSS) (PS) • To sort living things using the skills of selecting, classifying and categorising (CG) • To compare and contrast (CG) (PS) • Use scientific vocab related to health (eg exercise, heartbeat, breathing, hygiene, germs, disease, food types (examples – meat, fish, vegetables, bread, rice, pasta) (RSS) • To ask scientific questions (CFT) • To recall learnt information about humans and animals
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				<ul style="list-style-type: none">• Know that exercise, diet and hygiene are important for keeping healthy	<p>Investigating : (CFT) Our senses</p> <ul style="list-style-type: none">• To begin to suggest ways in which we could find answers to questions• To carry out simple tests accurately and with care (eg sight/ smell/ taste)• To make simple measurements in line with their developing Mathematical understanding• To record results• To describe results and begin to attempt to explain them (PS)• To recognise surprises (PS)• To begin to understand that tests should be “fair”
Everyday materials and their Uses			Everyday materials and their Uses		

	<p><i>(Y1 to focus more on properties and Y2 more on uses and on more advanced “skills” – building on last year’s work)</i></p> <p>Enquiry: Which material would be best to wrap the factory’s cotton in for transportation (ie waterproof and flexible)?</p> <p>Supporting enquiries: What material is this object made out of? What are some of the properties of this material and what might it be used for?</p> <ul style="list-style-type: none"> • Distinguish between an object and the material out of which it is made (What material is this object made out of?) • Identify and name a variety of everyday materials (including wood, plastic, glass, metal, water, rock) and a range of fabrics • Describe simple physical properties of materials (selected from: hard/soft, smooth/rough, reflective (shiny)/ non-reflective(dull), transparent/translucent/ opaque, flexible/rigid, liquid/solid, elastic, 	<ul style="list-style-type: none"> • To recognise and identify materials (Ob) (RSS) • To observe materials closely using all senses (Ob) • To describe observations and findings using some subject-specific vocabulary (see list of properties and names of materials) • To sort materials using the skills of selecting, classifying and categorising (CG) • To ask scientific questions (CFT) • To recall learnt information and skills <p>Investigating: (CFT) Waterproof or absorbent? How can the shape be changed?</p> <ul style="list-style-type: none"> • To begin to suggest ways in which we could find out which materials are waterproof/ absorbent and how we can change the shape of materials • To carry out simple tests accurately and with care • To make simple measurements • To record results • To describe results and begin to attempt to explain them (PS) • To recognise surprises (PS) 	<p><i>(Y1 to focus more on properties and Y2 more on uses and on more advanced “skills” – building on last year’s work)</i></p> <p>Enquiry: What do we use materials for and why? (Focus on materials used in buildings in Seend and Japan and best materials for making a collage and junk-model houses)</p> <p>Supporting enquiries: What material is this object made out of? What are some of the properties of this material and what might it be used for?</p> <ul style="list-style-type: none"> • Distinguish between an object and the material out of which it is made • Identify and name a variety of everyday materials (including wood, plastic, glass, metal, water, rock). Focus on a variety of Art and Craft materials (esp paper, clay) with which children are familiar and on materials used for buildings in Seend and in Japan (Art, DT and Geography link) • Describe and explore physical properties (selected from: hard/soft, smooth/rough, reflective 	<ul style="list-style-type: none"> • To recognise and identify materials (Ob) (RSS) • To observe materials closely using all senses (Ob) • To describe observations and findings using some subject-specific vocabulary (see list of properties and names of materials) • To sort materials using the skills of selecting, classifying and categorising (CG) • To ask scientific questions (CFT) • To recall learnt information and skills <p>Investigating: (CFT) Solubility?</p> <ul style="list-style-type: none"> • To begin to suggest ways in which we could find out what happens when we put materials in water • To carry out simple tests accurately and with care • To predict • To record results • To describe results and begin to attempt to explain them (PS) • To recognise surprises (PS) • To begin to understand that tests should be “fair”
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	<p>absorbent/waterproof, insulator/conductor)</p> <ul style="list-style-type: none"> • Compare, sort and group materials based on properties • Natural and man-made (cotton, wool, nylon etc) Focus on fabrics (wool, cotton, silk, synthetic), their origins (manmade or natural) and whether they are woven or knitted? (DT link) • Explore the concept of “waste” and how a factory might dispose of it in the past and today (environmental responsibility link) • Explore the states of water at a simple level recognising that steam, water and ice are the same material (and know that steam was used to power engines in the past). • Identify and compare the uses of different materials • Investigate how the shape of some solid materials can be changed by squashing, bending, twisting and 	<ul style="list-style-type: none"> • To begin to understand that tests should be “fair” 		<p>(shiny)/ non-reflective(dull), transparent/translucent/ opaque, flexible/rigid, liquid/solid, elastic, absorbent/waterproof, insulator/conductor)</p> <ul style="list-style-type: none"> • Compare, sort and group materials based on properties • Change the shape of some solid materials by squashing, bending, twisting and stretching (clay pots, scrunching/tearing collage materials) • Paper – explore in depth, looking at how properties relate to uses (to write on, paint on, wrap cheese, origami, make a fan etc) • Recycling materials: What happens to materials after we have finished with them (Reuse for junk modelling)? Which materials rot (paper link)? (environmental responsibility link) • Investigate which materials are soluble.
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<p>stretching (flexibility of wrapping materials).</p> <ul style="list-style-type: none"> • Investigate which materials are waterproof or absorbent 			
Seasonal Changes		Seasonal Changes	
<p><i>(Light-touch all year)</i></p> <p>Enquiry: Which season is it and how do we know?</p> <p>How do our chosen habitats change?</p> <ul style="list-style-type: none"> • Seasonal changes • Seasonal weather changes • Changes in day length <p><i>(Linked to observation of selected habitats/micro habitats in school grounds – see Living Things and their Habitats)</i></p>	<ul style="list-style-type: none"> • To recognise and identify seasonal change (Ob) (RSS) • To observe a habitat closely using all senses (Ob) • To describe observations and findings using some subject-specific vocabulary (animals, plants and weather related) • To compare and contrast (CG) • To ask scientific questions (CFT) • To record observations • To describe results and begin to attempt to explain them (PS) • To recognise surprises (PS) • To recall learnt information and skills 	<p><i>(Light-touch all year after focus in Terms 1 / 2)</i></p> <p>Enquiry: What is the weather like in the UK and how does it change from season to season? How can we describe, measure and record it?</p> <ul style="list-style-type: none"> • Observe and describe weather associated with the seasons • Changes in day length • Keep a record of weather for the year including some measuring (eg temperature/ rainfall) 	<ul style="list-style-type: none"> • To recognise and identify different weather (Ob) (RSS) • To observe weather closely using all senses (Ob) • To describe observations and findings using some subject-specific vocabulary (name different weathers and temperature comparison) • To ask scientific questions (CFT) • To begin to suggest ways in which we could find answers to questions (CFT) • To make very simple measurements in line with their developing Mathematical understanding (eg temperature, rainfall) • To record results • To recall learnt information
Living things and their habitats		Living things and their habitats	

	<p>Enquiries: <i>What is a habitat? What does alive or living mean? What must habitats provide? How can we find out more about a local habitat?</i> (These enquiries are applied to a few small areas/micro habitats in the school grounds and studied <i>throughout the year</i> – creating a book)</p> <ul style="list-style-type: none"> • Distinguish between things that are living, dead, never been alive • Know that most living things live in habitats to which they are suited and meet their needs • Identify and describe a variety of plants and animals • Begin to understand how animals obtain their food from plants and other animals (food chains) 	<ul style="list-style-type: none"> • To recognise and identify living things and seasonal change (Ob) (RSS) • To observe closely using all senses (Ob) • To describe observations and findings using some subject-specific vocabulary • To sort living things using the skills of selecting, classifying and categorising (living, dead, never been alive) (CG) • To compare and contrast animals and habitats (CG) (PS) • To ask scientific questions (CFT) 			
Additional/Optional					

	<p>Enquiries: <i>Where does light come from? What is the sun? What is Earth? What is the Moon/ Solar System? What are planets?</i></p> <ul style="list-style-type: none"> light, space, forces relating to work on Space and Moon Landings 	<ul style="list-style-type: none"> To observe closely (the night sky) (Ob) (PS) Research Space using books, Internet, people, pictures (RSS) (PS) To describe observations and findings using some subject-specific vocabulary (star, planet, Sun, Moon, Solar System) To begin to classify, name, compare and contrast the planets/ Moon/ Sun (CG) (PS) To ask scientific questions To recall learnt information and skills 			
Chestnut Class – Y3/4					
Year A	Knowledge	Skills	Year B	Knowledge	Skills
	Plants			Plants	

			<p>Enquiries/key questions from the unit: <i>What can happen if we don't look after plants? What conditions are right for growing plants?</i></p> <ul style="list-style-type: none"> • identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers • explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant • investigate the way in which water is transported within plants • explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal 	<ul style="list-style-type: none"> • Dissect a plant and identify parts and explain their functions ICG • Explore what is needed by growing plants in different conditions (inside, outside, fridge and cupboard). Observe what happens over the course of a few weeks OOT • Conduct an experiment to observe what happens when water is absorbed by a plant (with food colouring) CFT • Use research to find out what happens during pollination, germination and seed dispersal RSS
Animals, including humans			Animals, including humans	

	<p>Enquiries/key questions from the unit: <i>What can we do to look after our bodies?</i></p> <p><i>Supplementary questions/enquiries:</i> What can happen if we don't get the right nutrients? How do our skeletons and muscles help us? How do we digest food? What part do teeth play in digestion? Why do we need to look after our teeth?</p> <ul style="list-style-type: none"> • Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat • Identify that humans and some other animals have skeletons and muscles for support, protection and movement • Describe the simple functions of the basic parts of the digestive system in humans 	<ul style="list-style-type: none"> • Identify food groups and what nutrition they provide ICG • Group foods into nutrient group ICG • Discuss what happens when you don't get the correct nutrients • Identify and name different bones and muscles that make up our human body and explain why they help us (support, protection and movement) ICG • Group bones and muscles into categories (support, protection and movement) ICG • Use secondary sources to research parts of the digestive system RSS • Classify teeth dependent on their function ICG • Observe what happens when teeth decay (using vinegar and egg shells) OOT • Is there a pattern to food chains? PS 		
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	<ul style="list-style-type: none">• Identify the different types of teeth in humans and their simple functions• Construct and interpret a variety of food chains, identifying producers, predators and prey				
Rocks			Rocks		

<p>Enquiries/key questions from the unit: <i>What do rocks tell us about the way the Earth was formed?</i> What are rocks? Are rocks alive? How do you know? Why are there rocks everywhere? How do rocks form? What are the three types of rocks? What causes them to be different? Are all rocks hard? What about clay? Are Dinosaurs Real? Why do we have fossils for some animals and not others? What is a palaeontologist? Learn about Mary Anning (female scientist) and how she has contributed to our findings) What is soil? What is soil made from? What part do rocks play in forming soil?</p> <ul style="list-style-type: none"> • Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties • Recognise that soils are made from rocks and organic matter. • Describe in simple terms how fossils are formed when things that have lived are trapped within rock 	<ul style="list-style-type: none"> • Group rocks into categories (natural or man-made) ICG • Group rocks into their type based on their properties (igneous, sedimentary or metamorphic) ICG • Make observations of different types of rocks based on their properties Ob • Compare different rocks based on their properties ICG • Test permeability, durability and density of rocks CFT Research Mary Anning and her discovery RSS • Investigate soil permeability CFT 		
Light		Light	

			<p>Enquiries/key questions from the unit:</p> <p>NEED ENQUIRY QUESTION</p> <ul style="list-style-type: none"> • recognise that they need light in order to see things and that dark is the absence of light • notice that light is reflected from surfaces • recognise that light from the sun can be dangerous and that there are ways to protect their eyes • recognise that shadows are formed when the light from a light source is blocked by an opaque object • find patterns in the way that the size of shadows change 	<ul style="list-style-type: none"> • Explore sources of light (natural and man-made) • Classify, compare and group materials into reflective and non-reflective ICG • Observe what happens when an object blocks light Ob • Investigate how shadows change (size and position) during the day by drawing around an object or silhouette on the playground - look for patterns PS
Forces and magnets			Forces and magnets	

<p>Enquiries/key questions from the unit: NEED ENQUIRY QUESTION – (DOING IT TERM 4)</p> <ul style="list-style-type: none"> • Compare how things move on different surfaces (friction) • Notice that some forces need contact between 2 objects, but magnetic forces can act at a distance (push and pulls) • Observe how magnets attract or repel each other and attract some materials and not others • Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials • Describe magnets as having 2 poles • Predict whether 2 magnets will attract or repel each other, depending on which poles are facing 	<ul style="list-style-type: none"> • Compare how things move on different surfaces CFT • Identify forces in action ICG • Investigate friction by exploring a vehicle travelling over different surfaces ICG • Use magnets to observe how magnets attract or repel each other and attract some materials and not others Ob • 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 CFT and ICG 		
<p>States of matter</p>			<p>States of matter</p>

			<p>Enquiries/key questions from the unit: <i>What happens to chocolate under different temperature conditions? (MIGHT CHANGE NEXT YEAR)</i></p> <ul style="list-style-type: none"> • compare and group materials together, according to whether they are solids, liquids or gases • observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) • identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature 	<ul style="list-style-type: none"> • Classify objects and pictures of objects into solids, liquids and gases ICG • Apply heat to a range of materials (chocolate, butter, cheese and wax) and observe what happens Ob • Explain what happens during the melting and freezing process using scientific understanding of states changing, linked to particles and movement • Use research and other sources to explore and understand what happens at stages during the water cycle (linked to states changing) RSS
	Sound			Sound

			<p>Enquiries/key questions from the unit: <i>Is there a link between the time of day and how noisy it is in school?</i> (MIGHT CHANGE NEXT YEAR)</p> <ul style="list-style-type: none"> • identify how sounds are made, associating some of them with something vibrating • recognise that vibrations from sounds travel through a medium to the ear • find patterns between the pitch of a sound and features of the object that produced it • find patterns between the volume of a sound and the strength of the vibrations that produced it • recognise that sounds get fainter as the distance from the sound source increases 	<ul style="list-style-type: none"> • Use instruments to explore how sounds are made (vibrations) and feel for them Ob • Use research and secondary sources to find out how we hear sounds RSS • Conduct an experiment with different objects and instruments to find patterns between pitch PS • Conduct an experiment with different objects and instruments to find patterns between volume and the strength of vibrations PS • Observe what happens when you move closer/further away from a sound Ob
	Electricity			Electricity

			<p>Enquiries/key questions from the unit: <i>What material would be best to keep a drink warm? (MIGHT CHANGE NEXT YEAR)</i></p> <ul style="list-style-type: none"> • identify common appliances that run on electricity • construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • recognise some common conductors and insulators, and associate metals with being good conductors 	<ul style="list-style-type: none"> • classify objects into those that use electricity and those that don't ICG • Observe what happens when you remove parts from a circuit Ob • Explain why the circuit is not complete (flow of current interrupted) • Predict whether a lamp will light given the components in the circuit • Observe and look for patterns when increasing the number of cells or lamps to a circuit PS • Classify materials into those that conduct/insulate materials • Use secondary sources to discuss which material would be best/safest to use to keep a drink warm RSS
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	Living things and their habitats			Living things and their habitats	
				<p>Enquiries/key questions from the unit: How is human activity having an impact on animal habitats?</p> <ul style="list-style-type: none"> recognise that living things can be grouped in a variety of ways explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment recognise that environments can change and that this can sometimes pose dangers to living things 	<ul style="list-style-type: none"> Classify and group animals (vertebrates and invertebrates) ICG Classify and group animals (mammals, amphibians, reptiles, fish, insects, birds) ICG Use secondary sources to research habitats RSS Explore local habitats e.g. on school grounds or pond/stream study while on residential

Sycamore Class – Y5/6

Year A	Knowledge	Skills	Year B	Knowledge	Skills
		Living things and their habitats			
	•	•		•	•
	Animals, including humans			Animals, including humans	
	•	•		•	•
	Properties and changes of materials			Properties and changes of materials	
	•	•		•	•
	Earth and space			Earth and space	
	•	•		•	•
	Forces			Forces	
	•	•		•	•
	Evolution and inheritance			Evolution and inheritance	

•	•	•	•
Light		Light	
•		•	•
Electricity		Electricity	
•	•	•	•

The five enquiry types

- Observation over time = **OOT**
- Pattern seeking = **PS**
- Identifying, classifying and grouping = **ICG**
- Comparative and fair testing = **CFT**
- Research using secondary sources = **RSS**