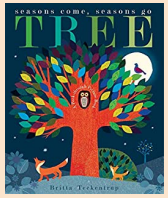
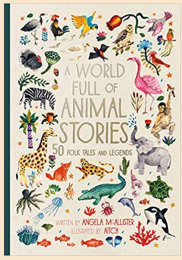
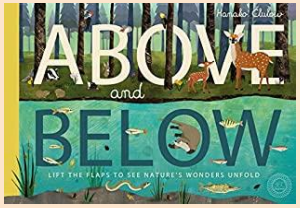
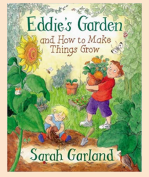
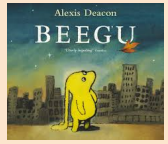
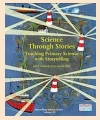
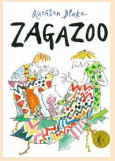
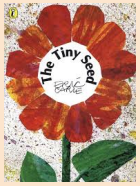
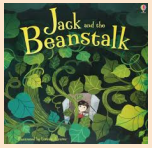
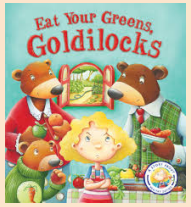
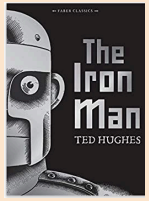
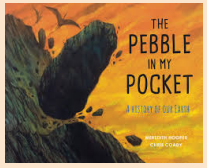
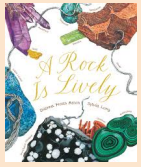
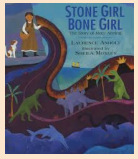
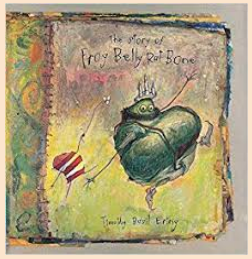
Stibbard Science Narrative 2025/2026

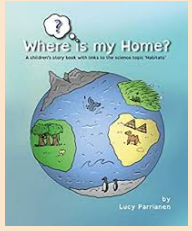
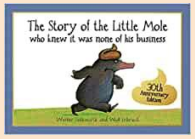
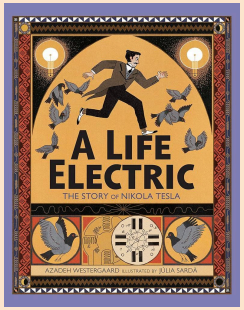
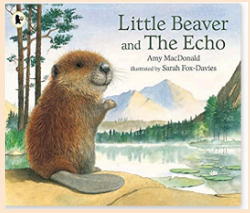
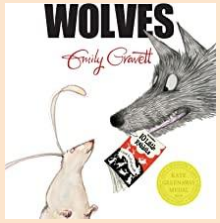
Science in the Early Years
Willow Class (Nursery) 0-3: Repeat actions that have an effect. Explore materials with different properties. Explore natural materials, indoors and outside. Explore and respond to different natural phenomena in their setting and on trips. Make connections between the features of their family and other families. Notice differences between people. Willow Class (Nursery) 3-4: Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Begin to make sense of their own life-story and family's history. Show interest in different occupations. Explore how things work. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice. Continue developing positive attitudes about the differences between people.
Cherry Class (Reception): Talk about members of their immediate family and community. Name and describe people who are familiar to them. Explore the natural world around them. Describe what they see, hear and feel whilst outside. Understand the effect of changing seasons on the natural world around them.

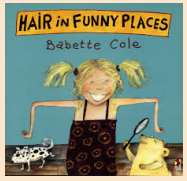
Year		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1	Knowledge	**Seasonal changes** over time. Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies. (This unit needs to be spread out over the year. Suggest one lesson per half term or two each term in order to cover the full four seasons)		Vocabulary: weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, Sun, sunrise, sunset, day length			
		Animals including humans (humans) Identify, name, draw and label the basic parts of the human body and say which part is associated with each sense.	**Plants** Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.	**Animals** (not including humans) Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name a variety of common animals that are carnivores, herbivores and omnivores.Describe and compare the structure of a variety of common animals		**Plants** Identify and describe the basic structure of a variety of common flowering plants including trees.	**Everyday Materials** Distinguish between an object and the material from which it is made. Identify and name a variety of everyday materials, including wood,

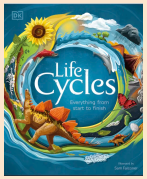
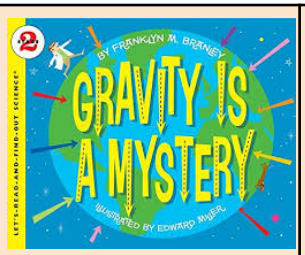
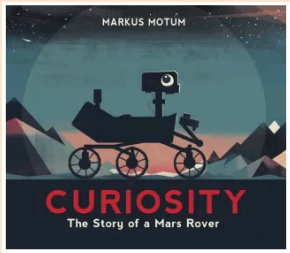
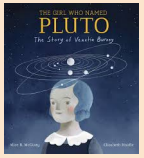
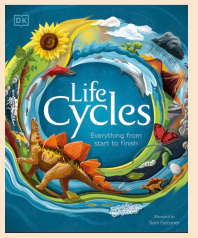
				(fish, amphibians, reptiles, birds and mammals, including pets)  	 	plastic, glass, metal, water and rock. Describe the simple physical properties of a variety of everyday materials. Compare and group together a variety of everyday materials on the basis of their simple physical properties.  
	Enquiry	Ask simple questions. Use scientific language Talk about findings Compare and sort things **Types of Enquiry:** Research and secondary sources	Use scientific language Gather data Observe closely **Types of Enquiry:** Observes changes over time	Compare and classify **Types of Enquiry:** Grouping and classifying	Observations of plants using simple equipment/changes over time **Types of Enquiry:** Observes changes over time	Perform simple tests Compare and sort things **Types of Enquiry:** Pattern seeking	Observing closely, use simple equipment. Ask simple questions **Types of Enquiry:** Observes changes over time
	Vocabulary	senses, touch, see, smell, taste, hear, fingers, skin, eyes, nose, ear, tongue	evergreen, deciduous, leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, bud (+the names of trees and names of garden and wild flowering plants in the local area)	head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, carnivores, herbivores, omnivores + range of names of animals experienced first-hand (from each vertebrate group: mammals, reptiles, amphibians, birds and fish)		evergreen, deciduous, leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, bud (+the names of trees and names of garden and wild flowering plants in the local area)	object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through

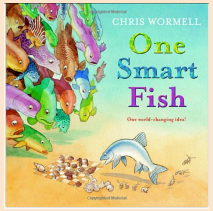
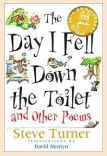
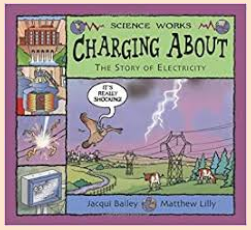
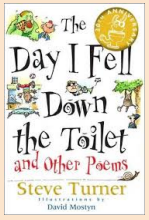
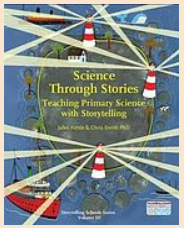
2	Knowledge	**Uses of Everyday Materials:** Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.   Traditional tale- The three little pigs AND The three little wolves and the big bad pig (or Stories through Science - Fairy Godmother's day off)	**Animals including humans:** Notice that animals, including humans, have offspring which grow into adults. Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.  	**Plants:** Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.  	**Living things and their habitats**: Explore and compare the differences between things that are living, dead and things that have never been alive. Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. Identify and name a variety of plants and animals in their habitat, including micr-habitats. Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food. 
	Enquiry	Observing closely, use simple equipment. Recognise that questions can be answered in different ways **Types of Enquiry:** Pattern seeking	Performing simple tests Use their observations and ideas to suggest answers to questions **Types of Enquiry:** Comparative and fair tests	Gathering & recording data (e.g. tally chart) to help in answering questions. **Types of Enquiry:** Research and secondary sources	Pattern seeking, identifying and classifying. **Types of Enquiry:** Grouping and classifying
	Vocabulary	Names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard Properties of materials – object, material, wood, plastic, glass, metal, water, rock, brick, paper,	offspring, reproduction, growth, baby, toddler, child, teenager, adult, old person, names of	light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling	living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold,

		fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through, opaque, transparent and translucent, reflective, non-reflective, flexible, rigid, shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching	animals and their babies (e.g. chick/hen, kitten/cat, caterpillar/butterfly), survive, survival, water food, air, exercise, heartbeat, breathing, hygiene, germs, disease, food types (e.g. meat, fish, vegetables, bread, rice, pasta, dairy)		names of living things in the habitats and micro-habitats studied names of local habitats (e.g. pond, woodland etc.), names of micro-habitats (e.g. under logs, in bushes etc.	
3	Knowledge	**Animals including Humans** (nutrition, skeletons and muscles) Identify that animals including humans need the right type and amount of nutrition and that they get nutrition from what they eat. Identify that animals, including humans have skeletons & muscles for support, protection and movement 	**Forces and Magnets** Compare how things move on different surfaces, know that some forces need contact but magnetic force can act at a distance, Observe how magnets attract and repel and group materials by whether they are attracted to a magnet 	**Rocks** Compare and group rocks based on their properties. Describe how fossils are formed. Recognise that soils are made from rocks and organic matter.  or  	**Plants** Identify the functions of parts of flowering plants, explore the requirements for life & growth, investigate the way water is transported within plants and explore the role flowers play in the life cycle of a plant. 	**Light** Recognise we need light to see and that dark is the absence of light. Know that light is reflected from surfaces and know how shadows are formed. Find patterns in how the size of a shadow changes. )
	Enquiry	Explain what they have found out. using results to draw simple conclusions Setting up simple practical enquiries, comparative and fair tests	Recording findings using simple scientific language, drawings, labelled diagrams **Types of Enquiry:** Comparative and fair tests	Gather, record and present findings in different ways **Types of Enquiry:** Grouping and classifying	Using results to draw simple conclusions. Setting up simple practical enquiries, comparative and fair tests	Recording findings using data logging, simple scientific language, drawings, labelled diagrams, explain what they have

		Types of Enquiry: Research and secondary sources Comparative and fair tests				**Types of Enquiry:** Observes changes over time	found out. **Types of Enquiry:** Pattern seeking
	Vocabulary	Nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, joints, support, protect, move, skull, ribs, spine		Force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole		Rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, soil, fossil, marble, chalk, granite, sandstone, slate, soil, peat, sandy/chalk/clay soil	Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal)	Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous
4	Knowledge	**Living Things and Their Habitats** Recognise that living things can be grouped, explore classification keys and recognise that environments can change. (Begin an observation over time, to be re-visited throughout the year) 	**Animals including Humans** Describe the basic parts of the digestive system, identify types of teeth and their functions 	**States of Matter** Groups materials as Solids, Liquids or Gases, Changes of State and the Water Cycle 	**Electricity** Construct simple circuits and identify whether a bulb will light in a circuit. Recognise conductors and insulators. 	**Sound** Identify that sounds are made by vibrations and they travel to our ears. Find relationship between pitch and the object and the relationship between volume and strength of vibrations. 	**Animals including Humans** Food Chains & webs  (or The Rabbit Problem- also by Emily Gravett)
	Enquiry	I can make careful observations, use scientific language.	use scientific language to label diagrams	Set up a fair test. Take accurate measurements using	I set up my own simple Tests. display and	Data logging, ask my own questions and use different ways to	I can make careful observations, use scientific language.

		Gather, record and present findings in different ways. Classify data, **Types of Enquiry:** Grouping and classifying	Use results to draw simple conclusions, suggest improvements and raise further questions **Types of Enquiry:** Research and secondary sources Observations over time.	standard units, using a range of equipment including thermometers and data loggers gather, record and present findings in different ways including oral and written explanations. **Types of Enquiry:** Comparative and fair tests	present Findings record findings in tables. Draw simple conclusions. Explain what they have found out **Types of Enquiry:** Pattern seeking	answer them. Gather, record, classify and present data in different ways. Draw simple conclusions, Explain what they have found out **Types of Enquiry:** Comparative and fair tests	Gather, record and present findings in different ways. **Types of Enquiry:** Pattern seeking
	Vocabulary	Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate	Digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, teeth, incisor, canine, molar, premolars, herbivore, carnivore, omnivore, producer, predator, prey, food chain	Solid, liquid, gas, state change, melting, freezing, melting point, boiling point, evaporation, temperature, water cycle	Electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal	Sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation	herbivore, carnivore, omnivore, producer, predator, prey, food chain, teeth, incisor, canine, molar
Yr 5	Knowledge	**Living Things and their Habitats** Plant life cycles and reproduction (Begin an observation over time, to be re-visited throughout the year)	**Forces** Explore the effects of gravity, air resistance, water resistance and friction. Understand mechanisms such as levers, gears and pulleys allow a small force to have a greater effect.	**Earth and Space** Understand the movements of the Earth and Moon relative to the Sun and the Moon relative to the Earth.	**Animals including Humans** Human Life Cycle and changes as humans develop to old age 	**Properties and Changes of Materials** (1)- grouping materials based on their properties, solubility and separating mixtures of materials	**Living Things and their Habitats** Animal life cycles and reproduction with a focus on mammal, amphibian, insect and bird.

		 		  			
Enquiry	Use their science experiences to explore ideas and raise different kinds of question. Report and present findings using speaking and writing inc. displays and presentations Look for different causal relationships in their data and identify evidence that refutes or supports their ideas. use diagrams, labels, classification and graphs **Types of Enquiry:** Grouping and classifying and observations over time.	Plan scientific enquiry to answer questions decide what observations to make and take appropriate readings. Use results to make predictions and set up more tests **Types of Enquiry:** Comparative and fair tests	use scientific language and illustrations use diagrams, labels, classification and graphs **Types of Enquiry:** Research and secondary sources	Use their science experiences to explore ideas and raise different kinds of question. Report and present findings using speaking and writing inc. displays and presentations Look for different causal relationships in their data and identify evidence that refutes or supports their ideas. use diagrams, labels, classification and graphs **Types of Enquiry:** Grouping and classifying and observations over time.	plan different types of scientific enquiries to answer questions set up fair tests Decide on observations to make use scientific language and diagrams decide how to record data and use scientific diagrams, keys, tables and graphs **Types of Enquiry:** Comparative and fair tests	Use their science experiences to explore ideas and raise different kinds of question. Report and present findings using speaking and writing inc. displays and presentations Look for different causal relationships in their data and identify evidence that refutes or supports their ideas. use diagrams, labels, classification and graphs **Types of Enquiry:** Grouping and classifying and observations over time.

	Vocabulary	Life cycle, reproduce, sexual, fertilises, asexual, plantlets, runners, bulbs, cuttings	Force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears	Earth, Sun, Moon, (Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune,) spherical, solar system, orbit, planets	Foetus, Embryo, Womb, Gestation, Baby, Toddler, Teenager, Elderly, Growth, Development, Puberty	Thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible	Life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis,
Yr 6	Knowledge	**Evolution and Inheritance** Recognise that living things have changed over time and that they produce offspring of the same kind. Explore how animals are suited to their environment.   (Poem:Who made the world?)	**Electricity** Associate the output of bulbs, buzzers with the number of cells. Use symbols to represent components.  	**Animals including Humans** Understand the circulatory system, know the impact of diet, exercise and drugs on the body, understand how nutrients and water are transported. In the body,  (Poem:The vegetables strike back)	**Light** Know that light travels in straight lines, understand how we see objects and explain how shadows are formed and what affects their size.  (short film clip) The Dark by Lemony Snicket	**Living Things and their Habitats** Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro organisms and plants and animals. Give reasons for classifying plants and animals based on specific characteristics. Hook: Recipe to make a wolf poem (Pie Corbett)  	**Properties and Changes of Materials** (2) Reversible and irreversible changes  (Death of a pancake - Science through stories)

	Enquiry	Identifying scientific evidence that has been used to support or refute ideas or arguments. Explain degree of trust in results. **Types of Enquiry:** Research and secondary sources	Plan a scientific enquiry to answer a question, recognising and controlling Variables. Report and present findings from enquiries using appropriate scientific language. Explain results **Types of Enquiry:** Pattern seeking	Use test result to make predictions to set up further comparative and fair tests **Types of Enquiry:** Comparative and fair tests	Pupil can consider how by modifying instrument or technique, measurements can be improved. Report and present findings from enquiries, including conclusions and causal relationships. Take accurate measurements and record data on a graph, noticing patterns. **Types of Enquiry:** Pattern seeking	Record the results of a survey using a classification key Report and present findings from enquiries using appropriate scientific language **Types of Enquiry:** Research and secondary sources, grouping and classifying.	Plan different types of scientific enquiries to answer questions set up fair tests Decide on observations to make use scientific language and diagrams decide how to record data and use scientific diagrams, keys, tables and graphs **Types of Enquiry:** Comparative and fair tests
	Vocabulary	Offspring, sexual reproduction, vary, characteristics, suited, adapted, environment, inherited, species, fossils	Circuit, complete circuit, circuit diagram, circuit symbol, cell, battery, bulb, buzzer, motor, switch, voltage	Heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle	Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous straight lines, light rays	Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering, non-flowering	Thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/non-reversible change, burning, rusting, new material