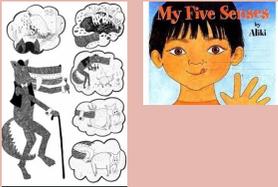
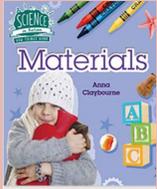
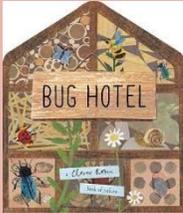
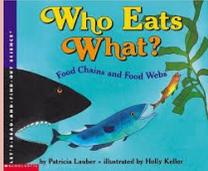
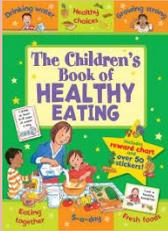
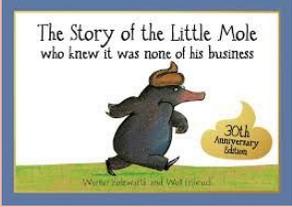
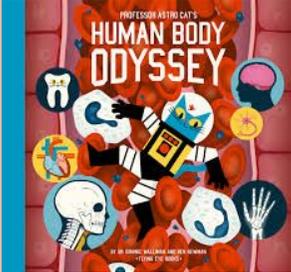
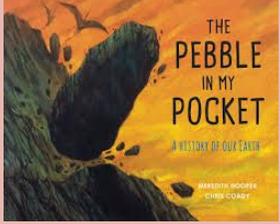
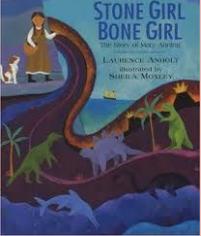
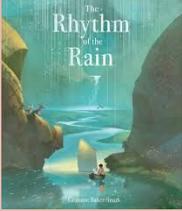
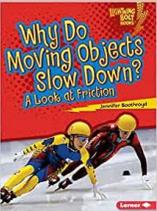
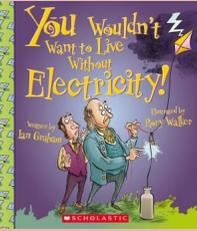
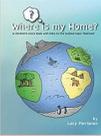


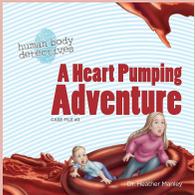
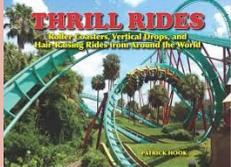
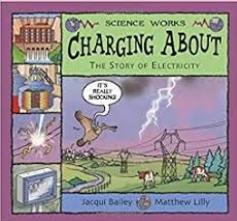
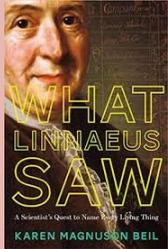
Science North Elmham Narrative

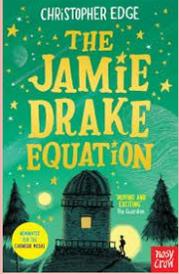
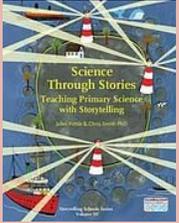
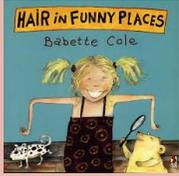
Year		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1	Knowledge	<p><i>Animals including humans (humans)</i></p> <p>Senses, body Linked to RE - senses</p> 	<p><i>Plants</i></p> <p><i>Deciduous and evergreen trees</i></p> <p>Identify and name a variety of common plants</p> 	<p><i>Animals Including Humans</i></p> <p>Compare body parts, looking at animals and humans. Identify and name a variety of common animals</p> 	<p><i>Plants</i></p> <p>Identify and describe the basic structure of a variety of common plants</p>	<p><i>Everyday Materials</i></p> <p>What does the word material mean?</p>	<p><i>Seasonal Changes</i></p> <p>Observe changes across the four seasons and how day length varies.</p> <p>(Text -Tree: Seasons Come, Seasons Go)</p>
	Enquiry	<p>ask simple questions. Use scientific language talk about findings</p>	<p><b>Working Scientifically:</b> observing closely, using simple equipment.</p> <p><b>Types of Enquiry:</b> Observes changes over time</p>	<p><b>Working Scientifically:</b> identifying and Classifying.</p> <p><b>Types of Enquiry:</b> Grouping and classifying</p>	<p><b>Working Scientifically:</b> using their observations and ideas to suggest answers to questions</p> <p><b>Types of Enquiry:</b> Comparative and fair tests</p>	<p><b>Working Scientifically:</b> asking simple questions and recognising that they can be answered in different ways</p> <p><b>Types of Enquiry:</b> Pattern seeking,</p>	<p><b>Working Scientifically:</b> gathering &amp; recording data (e.g. tally chart) to help in answering questions.</p> <p><b>Types of Enquiry:</b> Research and secondary sources</p>
	Vocabulary	<p>sight, hearing, touch, taste, smell, head, neck, ear, mouth, shoulder, hand, fingers, leg, foot, thumb, eye, nose, knee, toes, teeth, elbow</p>	<p>evergreen, garden plants, deciduous, wild plants, seeds, wild plants, garden plants</p>	<p>Amphibians, birds, fish, mammals, reptiles, carnivores, herbivore, omnivore</p>	<p>Leaves, blossom, petals, roots, buds, bulb, trunk, branches, stem</p>	<p>stretchy, stiff, dull, bendy/not bendy, waterproof/not waterproof, absorbent</p>	<p>Seasons, spring, summer, autumn, winter, windy, sunny, overcast, snow, rain, temperature</p>

2	<p><b>Knowledge</b></p>	<p><i>Uses of Everyday Materials</i> Identify and compare the suitability of a variety of everyday materials (Links to English-Vlad &amp; Great fire of London)</p> 	<p><i>Living things and their habitats</i> Living, dead, and things that have never been alive. Identify and describe different habitats</p> 	<p><i>Living things and their habitats</i> 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</p> 	<p><i>Plants</i> describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> 	<p>Animals including humans</p> 	<p>Animals including humans</p> 
	<p><b>Enquiry</b></p>	<p><b>Working Scientifically:</b> observing closely, using simple equipment.</p> <p><b>Types of Enquiry:</b> Observes changes over time</p>	<p><b>Working Scientifically:</b> asking simple questions and recognising that they can be answered in different ways</p> <p><b>Types of Enquiry:</b> Grouping and classifying</p>	<p><b>Working Scientifically:</b> identifying and classifying.</p> <p><b>Types of Enquiry:</b> Pattern seeking</p>	<p><b>Working Scientifically:</b> gathering &amp; recording data (e.g. tally chart) to help in answering questions.</p> <p><b>Types of Enquiry:</b> Research and secondary sources</p>	<p><b>Working Scientifically:</b> using their observations and ideas to suggest answers to questions</p> <p><b>Types of Enquiry:</b> Comparative and fair tests</p>	<p><b>Working Scientifically:</b> Performing simple tests</p> <p><b>Types of Enquiry:</b> Comparative and fair tests</p>
	<p><b>Vocabulary</b></p>	<p><b>Waterproof, fabric, rubber, cars, macadamisation, rock, paper, cardboard, wood, metal, plastic, glass, brick, twisting, squashing, bending, matches, cans, spoons, transparent, opaque</b></p>	<p><b>Living, dead, never alive, habitats, micro-habitats, food, food chain, leaf litter, shelter, sea shore, woodland, ocean, rainforest, conditions, desert, damp, shade</b></p>	<p><b>Observation, growth, compare, record, seeds, bulbs, temperature, roots, stem, predict, leaf, flower, diagram, measure, comparative tests, life cycle, life process, germinate, grain, dispersal.</b></p>	<p><b>exercise, heartbeat, breathing, hygiene, germs, disease, food types (examples – meat, fish, vegetables, bread, rice, pasta)</b></p>	<p><b>food, shelter, Offspring, reproduction, growth, child, young/old stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly),</b></p>	

3 / 4 (A)	<b>Knowledge</b> Animals including humans (teeth & digestive systems)  <p>What happens to the food I eat?</p>	Animals including humans (healthy body)  <p>How can I be healthy?</p>	<b>Rocks</b>  <p>I wonder if this is a natural rock</p>	<b>Fossils and Soil</b>  <p>What is the difference between rocks and fossils?</p>	<b>States of Matter</b>  <p>I wonder where the water goes?</p>
<b>Enquiry</b>	use scientific language to label diagrams Use results to draw simple conclusions, suggest improvements and raise further Questions <b>Types of Enquiry:</b> Research and secondary sources Observations over time.	Explain what they have found out. using results to draw simple conclusions <b>Types of Enquiry:</b> Comparative and fair tests	Gather, record and present findings in different ways <b>Types of Enquiry:</b> Grouping and classifying	Setting up simple practical enquiries, comparative and fair tests <b>Types of Enquiry:</b> Comparative and fair tests	Set up a fair test. Take accurate measurements using 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. <b>Types of Enquiry:</b> Comparative and fair tests
<b>Vocabulary</b>	<b>skeleton, bones, joints, endoskeleton, exoskeleton, hydrostatic skeleton, vertebrates, invertebrates, muscles, contract, relax</b>	<b>Nutrients, nutrition, carbohydrates, protein, fats, vitamins, minerals, water, fibre,</b>	<b>Rocks, igneous, metamorphic, sedimentary, anthropic, permeable, impermeable</b>	<b>chemical fossil, body fossil, trace fossil, Mary Anning, cast fossil, mould fossil, replacement fossil, extinct, organic matter, top soil, sub soil, base rock</b>	<b>Solid, liquid, gas, particles, state, materials, properties, matter, melt, freeze, water, ice, temperature, process, condensation, evaporation, water vapour, energy, precipitation, collection,</b>

2/3/ 4 (B)	Knowledge	<p>Plants functions of different parts of flowering plants, requirements of plants for life and growth, way in which water is transported within plants, life cycle of flowering plants</p> 	<p>Sound How it is made, travel through different mediums, patterns, relationship between sound and distance (links to English)</p> 	<p>Forces &amp; Magnets Contact magnets, magnetic forces. Magnets attract, repel some materials. Compare and group and predict -different materials</p> 	<p>Electricity Construct, identify and name parts of a circuit. Simple series circuits. conductors/insulators.</p> 	<p>Living Things and their Habitats 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</p>   <p>(mummy can I have a penguin?- Science through stories)</p>	<p>Light Absence of light, reflect from surfaces, dangers of light, how to form shadows and create patterns</p> 
	Enquiry	<p>Using results to draw simple conclusions. Setting up simple practical enquiries, comparative and fair tests <b>Types of Enquiry:</b> Observes changes over time</p>	<p>Data logging, ask my own questions and use different ways to answer them. Gather, record, classify and present data in different ways. Draw simple conclusions, Explain what they have found out <b>Types of Enquiry:</b> Comparative and fair tests</p>	<p>Recording findings using simple scientific language, drawings, labelled diagrams <b>Types of Enquiry:</b> Comparative and fair tests</p>	<p>I set up my own simple Tests. display and present Findings record findings in tables. Draw simple conclusions. Explain what they have found out <b>Types of Enquiry:</b> Pattern seeking</p>	<p>I can make careful observations, use scientific language. Gather, record and present findings in different ways. Classify data, <b>Types of Enquiry:</b> Grouping and classifying</p>	<p>Recording findings using data logging, simple scientific language, drawings, labelled diagrams, explain what they have found out. <b>Types of Enquiry:</b> Pattern seeking</p>
	Vocabulary	<p><b>Flowering plants, roots, stem/ trunk, leaves, flowers Nutrition, support, reproduction, air, light, water, Nutrients, fertiliser life cycle, pollination, seed formation,</b></p>	<p><b>Amplitude, volume, quiet, loud, ear, pitch, high, low, particles, instruments, wave</b></p>	<p><b>Force, push, pull, friction, surface, magnet, magnetic, magnetic field, pole, north, south, attract, repel, compass.</b></p>	<p><b>Electricity, neutrons, protons, electrons, nucleus, atom, electric current, appliances, mains, crocodile clips, wires, bulb, battery cell, battery holder, motor, buzzer, switch, conductor, electrical</b></p>	<p><b>animals, vertebrates, fish, amphibians, reptiles, mammals, invertebrate, human impact, nature reserves, deforestation. environment</b></p>	<p><b>Light source, dark, reflect, ray, mirror, bounce, visible, beam, sun, glare, travel, straight, opaque, shadow, block, transparent, translucent.</b></p>

		seed dispersal			insulator, conductor		
5/ 6 (A)	Knowledge	<p>Animals including Humans Gain understanding of our circulatory system &amp; how to achieve good health through good exercise and diet.</p> 	<p>Light Explore the phenomena of light: its behaviour, shadows, colour, reflection, refraction. Use knowledge to make suggestions of light use in the theatre (Cross curricular link)</p>	<p>Forces Build on Force and Magnets from Y3 curriculum force of gravity acting between the Earth and the falling object identify the effects of air resistance, water resistance and friction, that act between moving surfaces recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> 	<p>Electricity Compare and give reasons for variations in how components Function. Recognised symbols</p> 	<p>Living Things and Their Habitats (classification) Common Observable Characteristics and based on similarities and Differences,</p> 	Properties of Materials (B)
	Enquiry	<p>Use test result to make predictions to set up further comparative and fair tests <b>Types of Enquiry:</b> Comparative and fair tests</p>	<p>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. <b>Types of Enquiry:</b> Pattern seeking</p>	<p>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 <b>Types of Enquiry:</b> Comparative and fair tests</p>	<p>Plan a scientific enquiry to answer a question, recognising and controlling Variables. Report and present findings from enquiries using appropriate scientific language. Explain results <b>Types of Enquiry:</b> Pattern seeking</p>	<p>Record the results of a survey using a classification key Report and present findings from enquiries using appropriate scientific language <b>Types of Enquiry:</b> Research and secondary sources</p>	<p>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 <b>Types of Enquiry:</b> Comparative and fair tests</p>
	Vocabulary	<b>Oxygenated, Deoxygenated, Valve, Exercise, Respiration</b>	<b>Light, source, dark, shadow, block, absorb, direct/</b>	<b>Air resistance, Water resistance, Friction, Gravity, Newton,</b>	<b>Electric current, appliances, mains, crocodile clips,</b>	<b>Variation Organisms Populations. Classification</b>	<b>Hardness, Solubility, Transparency,</b>

		<p>Circulatory system, heart, lungs, blood vessels, blood, artery, vein, pulmonary, alveoli, capillary, digestive, transport, gas exchange, villi, platelets, plasma, exercise, diet, lifestyle</p>	<p>direction, transparent, opaque, translucent, straight, cone, colour, spectrum, rainbow, reflective materials, reflection, angle of incidence/reflection, beam, straight, scatter, distort, convex, concave, plane, reflection, ray, bent, focal point, refraction</p>	<p>Gears, Pulleys, force, push, pull, opposing, streamline, brake, mechanism, lever, cog, machine, pulley</p>	<p>wires, bulb, battery cell, battery holder, motor, buzzer, switch, conductor, electrical insulator, conductor.</p>	<p>Characteristics Environment, flowering, nonflowering, plants, animals, vertebrates, fish, amphibians, reptiles, mammals, invertebrate, human impact, nature reserves, deforestation. Classify, compare, bacteria, microorganism, organism, invertebrates, vertebrates, Linnaean.</p>	<p>Conductivity, Magnetic, Filter, Evaporation, Dissolving, Mixing Material, conductor, dissolve, insoluble, suspension, chemical, physical, irreversible, solution, reversible, separate, mixture, insulator, transparent, flexible, permeable, soluble, proper</p>
5/6 (B)	<p>Knowledge</p>	<p>Earth &amp; Space</p> <p>Movements and earth's rotation (English Link)</p> 	<p>Properties of Materials (A)</p> <p>Test materials on their strength, thermal conductivity, transparency, absorption, sound insulation, electrical insulation and hardness.</p>  <p>(Death of a pancake)</p>	<p>Animals including Humans (the human species)</p> <p>Describe the changes as humans develop from birth to old age.</p>  	<p>Living Things &amp; Their Habitats (life cycles)</p> <p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</p> <ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> </ul>	<p>Evolution &amp; Inheritance</p> <p>Changes overtime, offspring carries and adaptation may lead to evolution</p>	<p>Revision Block (A)</p>
	<p>Enquiry</p>	<p>Report &amp; present findings, noting causal relationships &amp;</p>	<p>Plan &amp; carry out different types of scientific enquiries to</p>	<p>Report &amp; present findings, noting causal relationships &amp;</p>	<p>Plan &amp; carry out different types of scientific enquiries to</p>	<p>Plan &amp; carry out different types of scientific enquiries to</p>	<p>Recap of enquiry skills</p>

		degrees of trust in results. Identify scientific evidence to support or refute ideas.	answer questions including recognising and controlling variables, taking increasingly accurate & precise measurements & repeating readings. Report & present findings, noting causal relationships & degrees of trust in results. Identify scientific evidence to support or refute ideas.	degrees of trust in results. Identify scientific evidence to support or refute ideas.	answer questions including recognising and controlling variables, taking increasingly accurate & precise measurements & repeating readings. Report & present findings, noting causal relationships & degrees of trust in results. Identify scientific evidence to support or refute ideas.	answer questions including recognising and controlling variables, taking increasingly accurate & precise measurements & repeating readings. Report & present findings, noting causal relationships & degrees of trust in results. Identify scientific evidence to support or refute ideas.	
Vocabulary	<b>Earth, Sun, Moon, Axis, Rotation, Day, Night, Phases of the Moon, star, constellation, waxing, waning, crescent, gibbous. Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, planets, solar system, day, night, rotate, orbit, axis, spherical, geocentric, heliocentric</b>	<b>Recycling, properties, thermal and electrical conductor / insulator, strength, graph / table, fair test, sound proofing.</b>	<b>Foetus, Embryo, Womb, Gestation, Baby, Toddler, Teenager, Elderly, Growth, Development, Puberty</b>	<b>Environment, flowering, nonflowering, plants, animals, vertebrates, fish, amphibians, reptiles, mammals, invertebrate, human impact, nature reserves, deforestation. Sexual, asexual, reproduction, cell, fertilisation, pollination, male, female, pregnancy, gestation, young, mammal, metamorphosis, amphibian, insect, egg, embryo, bird, plant</b>	<b>Fossils, Adaptation, Evolution, Characteristics, Reproduction, Genetics</b>	Recap of all vocabulary	