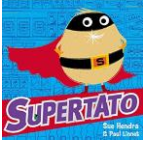





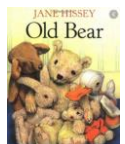




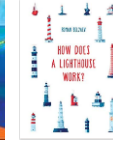
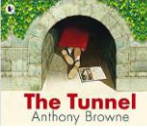

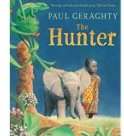
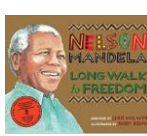

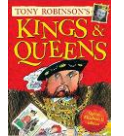


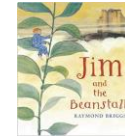











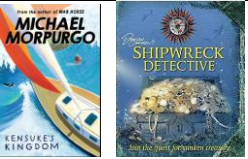



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	 	 	 	 	 	 
Book –led Science	Explore: What is the best material for Supertato's cape?	Explore: What are the seasons? When is it hot? When is it cold?	Explore: Which materials are the strongest for building homes with? what type of animals are in our books?	Explore: Which material is the softest and best for making teddies?	Explore: Which plants are there in our gardens/ School garden?	Explore: In what type of weather might a lighthouse be needed?
Science	Everyday Materials	Seasonal Changes (Aut) Seasonal Changes (Winter).	Animals, including humans. Animals Including Humans - Types of animals	Seasonal Changes (Spring) Animals including humans – carnivores / herbivore	Plants.	Seasonal Changes (Summer) Plants
NC Objectives	Distinguish between an <b>object and the material</b> from which it is made. <b>Identify and name</b> a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. Describe the simple <b>physical properties</b> of a variety of everyday materials. <b>Compare and group</b> together a variety of everyday materials on the basis of their simple physical properties.	Observe changes that occur across the four seasons. Observe and describe weather associated with the seasons and how the day length varies.	<b>Identify and name</b> a variety of common animals including fish, amphibians, reptiles, birds and mammals. Describe and compare the <b>structure</b> of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).	Observe changes that occur across the four seasons. Observe and describe weather associated with the seasons and how the day length varies.  <b>Identify and name</b> a variety of common animals that are carnivores, herbivores and omnivores. Identify, name, draw and label the basic parts of the human body and say which part is associated with each sense.	Identify and <b>name a variety of common wild and garden plants</b> , including deciduous and evergreen trees. Identify and describe the basic <b>structure</b> of a variety of common flowering plants, including trees.	Observe changes that occur across the four seasons. Observe and describe weather associated with the seasons and how the day length varies.  Identify and <b>name a variety of common wild and garden plants</b> , including deciduous and evergreen trees. Identify and describe the basic <b>structure</b> of a variety of common flowering plants, including trees.
Links / Progression	Links to Y1 DT: Creating a cape for Supertato.	Links to Y1 Geog: hot and cold places / weather.	Book-led Science builds on Y1, Aut 1.	Book-led Science builds on Y1, Aut 1.		

Year 2	 	 	 	 	 	 
Book-led Science		Explore: What is the elephant's habitat? What another creatures live in this habitat?		Explore: Which materials are suitable for building safer, fire-resistant homes?	Explore: What are the best conditions for growing our beanstalks?	What do we know about foxes?


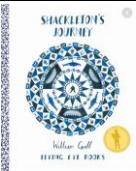





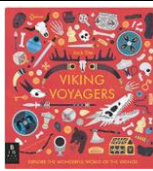

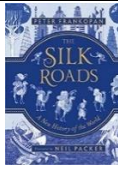

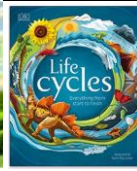
Science	Animals, including humans: Basic needs of humans for survival; importance of diet, exercise and hygiene.	Living things and their habitats.	Plants	Uses of everyday materials	Plants	Animals, including humans: basic animals have offspring.
NC Objectives	Find out about and describe the basic needs 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.	Explore and compare the differences between things that are <b>living, dead, and things that have never been alive</b> . Identify that most living things live in <b>habitats</b> 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. <b>Identify and name a variety of plants and animals</b> in their habitats, including micro-habitats. Describe <b>how animals obtain their food</b> from plants and other animals, using the idea of a simple <b>food chain</b> , and identify and name different sources of food.	Observe and describe <b>how seeds and bulbs grow</b> into mature plants.	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.	Observe and describe <b>how seeds and bulbs grow</b> into mature plants. Find out and describe how <b>plants need</b> water, light and a suitable temperature to grow and stay healthy.	Notice that animals, including humans, have offspring which grow into adults.
Links / Progression	Builds on Y1 Science – Animals, including humans.	Builds on Y1 Science – Animals, including humans: types of animals.		Builds on Y1 Science – Everyday Materials.	Builds on Y1 Science – Plants.	Builds on Y1 Science – Animals, including humans.

Year 3						
Book-led Science	What are the similarities and differences between rabbit and human skeletons?	Explore: Is the iron man magnetic?		Explore: Can we label & explain the purpose of each part of the dragon plant?	Explore: How did the 'Tinnners' mine through rock?	
Science	Animals, including humans: skeletons; muscles.	Forces and Magnets	Light	Plants	Rocks	Animals, including humans: diet and nutrition.


<p>NC Objectives</p>	<p>Identify that humans and some animals have skeletons and muscles for support, protection and movement.</p>	<p>Compare how things move on different surfaces. Notice that some forces need contact between two objects, but magnetic forces can act at a distance. 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 two poles. Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p>	<p>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 a solid object. Find patterns in the way that the size of shadows change.</p>	<p>Identify and describe the <b>functions</b> 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, &amp; room to grow) &amp; how they vary from plant to plant. Investigate the way in which <b>water is transported</b> within plants. Explore the <b>part that flowers play</b> in the life cycle of a flowering plant, including pollinations, seed formation and seed dispersal.</p>	<p>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Describe in simple terms how fossils are formed when things that have lived are trapped within rock. Recognise that soils are made from rocks and organic matter.</p>	<p>Identify that animals, including humans, need the right types and amount of <b>nutrition</b>, and that they cannot make their own food, they get nutrition from what they eat.</p>
<p>Links / Progression</p>	<p>Builds on Y2 Science – Animals, including humans: exercise.</p>	<p>Builds on Y1 &amp; Y2 Science – Everyday Materials.</p>		<p>Builds on Y1 &amp; Y2 Science – Plants.</p>	<p>Builds on Y1 &amp; Y2 Science – Everyday Materials.</p>	<p>Builds on Y2 Science – Animals, including humans: basic needs.</p>

<p>Year 4</p>						
<p>Book-led Science</p>	<p>Explore: What evidence is there for dental health in the Iron Age?</p>			<p>Explore: What is the food chain of a fox?</p>	<p>Explore: forces for building pyramids, shadufs.</p>	<p>Explore: How are rainforests changing and what dangers does this pose to wildlife?</p>
<p>Science</p>	<p>Animals including humans: digestive system and teeth.</p>	<p>Electricity</p>	<p>States of Matter Water Cycle</p>	<p>Animals, including humans: food chains.</p>	<p>Sound</p>	<p>Living Things and Habitats</p>
<p>NC Objectives</p>	<p>Describe the simple functions of the basic parts of the <b>digestive system</b> in humans.</p>	<p>Identify common appliances that run on electricity. Construct a simple series electrical circuit, identifying and naming its basic parts,</p>	<p>Compare and group materials together, according to whether they are solids, liquids or gases.</p>	<p>Construct and interpret a variety of <b>food chains</b>, identifying producers, predators and prey.</p>	<p>Identify how sounds are made, associating some of them with something vibrating.</p>	<p>Recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group, identify</p>

	Identify the different types of <b>teeth</b> in humans and their simple functions.	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.	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.		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 increases.	and name a variety of living things in their local and wider environment. Recognise that <b>environments can change</b> and that this can sometimes pose dangers to living things.
Links / Progression	Builds on Y3 Science, Animals, including humans.		Builds on Y2 Science – Everyday Materials.	Builds on Y2 Science – Living things and habitats.	Links to Music. Links to Science – forces.	Builds on Y2 Science – Living things and habitats.

Year 5	 	 	 	 	 	 
						books
Book-led Science	Explore: What is the best material for insulation against the cold?	Explore: What is it like in space? What do we know about the moon?	Explore: What materials are best for creating shields for the warriors?			Explore: How is each creature similar to and different from the others?
Science	Forces and magnets.	Earth and Space	Materials and their properties	Changes of materials	Living things and their habitats – plant life cycles & reproduction.	Living things and their habitats – plant life cycles & reproduction. Animals, including humans – changes from birth to old age.
NC Objectives	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Identify the effects of air resistance, water resistance	Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. Describe the movement of the Moon relative to the Earth.	Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.	Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. Use knowledge of solids, liquids and gases to decide how mixtures might be	Describe the life process of <b>reproduction</b> in some plants and animals.	Describe the difference in the <b>life cycles</b> of mammal, an amphibian, an insect and a bird. Describe the changes as humans develop from birth to old age.

	and friction that act between moving surfaces. Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have greater effect.	Describe the Sun, Earth and Moon as approximately spherical bodies. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.	Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.	separated, including through filtering, sieving and evaporating. Demonstrate that dissolving, mixing and changes of state are reversible changes. Explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action on bicarbonate of soda.		
Links / Progression	Builds on Y3 Science – Forces and Magnets.	Builds on Y5 Science – Forces and Magnets.  Builds on Y1 Science – Seasonal Changes (day length).	Builds on Y4 Science – Electricity. Builds on Y3 Science – Forces and Magnets. Builds on Y1 & Y2 Science – Everyday materials.	Builds on Y4 Science – States of Matter. Builds on Y2 Science – Everyday materials – change shape of solids.	Builds on Y4 Science – Living things and habitats: Living things can be grouped. Builds on Y3 Science – Plants: flowers in life cycle & seed dispersal.	Builds on Y2 Science – Animals including humans: animals have offspring which grow into adults. Builds on Y4 Science – Living things and habitats: Living things can be grouped. Builds on Y3 Science – Plants: flowers in life cycle & seed dispersal. Builds on Y2 Science – Animals including humans: animals have offspring which grow into adults.

Year 6						
Book-led Science	Explore: Medical science – heart transplants / pacemakers.			Explore: Research classification of wolves. How are wolves adapted to their environment?		Explore: Who was Charles Darwin and why was his work significant?
Science	Animals, including humans.	Light	Electricity	Living Things and their Habitats	Greek scientific Achievements Research and explore the works of ancient Greek	Evolution and Inheritance

					mathematician and inventor Archimedes. Investigate density.	
NC Objectives	Describe the ways in which <b>nutrients</b> and water are transported within animals, inc. humans. Identify and name the main parts of the <b>human circulatory system</b> , and describe the functions of the heart, blood vessels and blood. Recognise <b>the impact of diet, exercise, drugs and lifestyle</b> on the way their bodies function.	Recognise that light appears to travels in straight lines. Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. Explain that we see things because light travels from light sources to our eyes or from light sources to object and then to our eyes. Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. Compare and give reasons fro variations in how components function, including the brightness of bulbs, the loudness of buzzer and the on/off position of switches. Use recognised symbols when representing a simple circuit in a diagram.	Describe how living things are <b>classified</b> into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. Give reasons for <b>classifying</b> plants and animals based on specific characteristics.	Archimedes was born in 287BC and is famous for many physics and maths discoveries. Volume = the amount of space and object occupies. Mass = the measure of matter in an object. Density = Mass divided by volume. Water displacement: is when an object is fully submerged in a fluid thus creating the volume of the fluid to rise by the volume of the object. Archimedes screw allows water to be shifted from low to high ground.	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.
Links / Progression	Builds on Y4 Science - Animals including Humans: digestive system.	Builds on Y3 Science – Light.	Builds on Y4 Science - Electricity.	Builds on Y4 Science - Living things and habitats: classification keys.		Builds on Y3 Science – Rocks: fossils.