Reception	<u>Term 1</u>	Term 2	Term 3	Term 4	<u>Term 5</u>	<u>Term 6</u>
	Me and My community - This project teaches children to recognise and discuss how they have changed from when they were babies.	Starry Night - This project teaches children and light and dark and different animals that are nocturnal. Children will think about what happens when they fall asleep and why it is dark at night.	Once upon a time This project teaches children to identify that materials have different properties and explore and sort magnetic and non-magnetic materials through play and exploration. It also teaches them to compare and group objects and materials according to simple given criteria.	Dangerous Dinsoaurs  This project teaches children about shadows and allows them to explore how to make shadows.	Ready Steady Grow  This project teaches children to identify the origins of some foods. It also teaches them to describe some ways that plants or animals should be cared for in order for them to survive. They will also learn to describe, predict and sort things that float and sink and talk about the forces that they can feel.	On the Beach  This project teaches children to develop scientific knowledge through play activities, sharing stories and non-fiction books and discussion. They will describe, predict and sort things that float and sink and talk about the forces that they can feel.

Year 1	<u>Term 1</u>	Term 2	Term 3	Term 4	<u>Term 5</u>	<u>Term 6</u>
	Seasonal Changes	Everyday Materials	Animals including humans	<u>Plants</u>	Seasonal Changes	Animals including humans
	This project teaches children about the seasons, seasonal changes and typical seasonal weather and events.	This project teaches children that objects are made from materials. They identify a range of everyday materials and their sources. Children investigate the properties of materials and begin to recognise that a material's properties define its use.	This project teaches children about animals, including fish, amphibians, reptiles, birds, mammals and invertebrates. They identify and describe their common structures, their diets and how animals should be cared for.	This project teaches children about wild and garden plants by exploring the local environment. They identify and describe the basic parts of plants and observe how they change over time.	This Project teaches children about measuring the weather and the role of a meteorologist. Children begin to learn about the science of day and night and recognise that the seasons have varying day lengths in the UK.	This project teaches children that humans are a type of animal, known as a mammal. They name body parts and recognise common structures between humans and other animals. They learn about the senses, the body parts associated with each sense and their role in keeping us safe.

Year 2	Term 1	Term 2	Term 3	<u>Term 4 and 5</u>	<u>Term 6</u>
	Investigations:	Materials Identify and	Living things and their Habitats	Animals Including Humans	<u>Plants</u>
	What's on your wellies? Children collect mud from the soles of their wellington boots and add it to a tray of compost to see how seeds disperse and are carried by humans to new places.  Can you make a paper bridge? How we can make weak, flexible materials stronger and more rigid by changing their shape.	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.	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 habitats, including microhabitats.  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.	Investigation: Why do I exercise?  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.	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.

Year 3	Term 1	Term 2	<u>Term 3</u>	Term 4	Term 5 and 6
	Rocks This project teaches children to compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. To describe in simple terms how fossils are formed when things that have lived are trapped within rock, to recognise that soils are made from rocks and organic matter.	Forces and Magnets This project teaches children to compare how things move on different surfaces, to notice that some forces need contact between two objects, but magnetic forces can act at a distance. Also to observe how magnets attract or repel each other and attract some materials and not others, to 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. To describe magnets as having two poles, predict whether two magnets will attract or repel each other, depending on which poles are facing.	Animals Including Humans This project teaches children to 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. They identify that humans and some animals have skeletons and muscles for support, protection and movement.	Plants This project teaches children to identify and describe the functions of different parts of plants; roots, stem, leaves and flowers. To explore the requirements of plants for life and growth (air, light, nutrients from soil and room to grow) and how they vary from plant to plant. Investigate the ways in which water is transported within plants, explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal	Light This project teaches children to recognise that they need light in order to see things and that dark is the absence of light, to notice that light is reflected from surfaces. Also recognise that light from the sun can be dangerous and that there are ways to protect their eyes, to 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 sizes of shadows change.

Year 4	<u>Term 1</u>	<u>Term 2</u>	<u>Term 3</u>	<u>Term 4</u>	<u>Term 5</u>	<u>Term 6</u>
	Sound	Electrical Circuits and Conductors	Digestive System	States of Matter	Grouping and Classifying	Working Scientifically

Year 5	Term 1	Term 2	Term 3	Term 4 and 5	<u>Term 6</u>
	Animals including	Earth and Space	Properties and changes of materials	<u>Forces</u>	Living things
	<u>humans</u>	This project teaches		This project teaches	and their habitats
	This project	children to describe the	This project teaches children to compare	children that unsupported	This project
	explored the	movement of the Earth,	and group together everyday materials	objects fall towards the	teaches children to
	human timeline,	and other planets,	on the basis of their properties, including	Earth because of the force	describe the
	the growth of	relative to the Sun in	their hardness, solubility, transparency,	of gravity acting between	differences in the
	babies,	the solar system,	conductivity (electrical and thermal), and	the Earth and the falling	life cycles of a
	puberty in humans	describe the movement	response to magnets, also to understand	object, to identify the	mammal, an
	and animals,	of the Moon relative to	that some materials will dissolve in liquid	effects of air resistance,	amphibian, an
	changes in old age	the Earth, to describe	to form a solution, and describe how to	water resistance and	insect and a bird to
	gestation periods	the Sun, Earth and	recover a substance from a solution. To	friction, that act between	describe the life
	life expectancy	Moon as approximately	use knowledge of solids, liquids and gases	moving surface and	process of
	, ,	spherical bodies and use	to decide how mixtures might be	recognise that some	reproduction in
		the idea of the Earth's	separated, including through filtering,	mechanisms, including	some plants and
		rotation to explain day	sieving and evaporating, give reasons,	levers, pulleys and gears,	animals.

and ni	ght and the	based on evidence from comparative and	allow a smaller force to
appare	ent movement of	fair tests, for the particular uses of	have a greater effect.
the Su	n across the sky	everyday materials, including metals,	
		wood and plastic, 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 of	
		acid on bicarbonate of soda.	

Year 6	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Identity &	Living Things &	Blood	Electricity	(Continuing with	<b>Light Theory</b>
	Darwin's Delights	Their Habitats	<b>Heart/Circulatory</b>		Electricity)	
	Evolution &		<u>System</u>	<b>Electrical Circuits</b>	<b>Light Theory</b>	This project
	<u>Inheritance</u>	Frozen Kingdoms		and Components		teaches children
			<b>Animals Including</b>		This project	about the way that
	This project	This project	<u>humans</u>	This project	teaches children	light behaves,
	teaches children	teaches children to		teaches children	about the way that	travelling in
	about how living	give reasons for	This project	about electrical	light behaves,	straight lines from
	things on Earth	classifying plants	teaches children	circuits, their	travelling in	a source or
	have changed over	and animals based	about the transport	components and	straight lines from	reflector, into the
	time, and how	on specific	role of the human	how they function.	a source or	eye. They explore
	fossils provide	characteristics.	circulatory system,	They recognise	reflector, into the	phenomena
	evidence for this.	Identify how	its main parts and	how the voltage of	eye. They explore	associated with
	They learn how	animals and plants	their primary	cells affects the	phenomena	light, including
	characteristics are	are adapted to suit	functions. They	output of a circuit	associated with	shadows,

## St George's Science – Long Term Plan

p	passed from	their environment	learn about healthy	and record circuits	light, including	reflections,
p	parents to their	in different ways	lifestyle choices	using standard	shadows,	rainbows and
	offspring, and how	and that	and the effects of	symbols. It also	reflections,	diffraction.
V	variation in	adaptation may	harmful substances	teaches children	rainbows and	
	offspring can affect	lead to evolution.	on the body.	about	diffraction.	
t	their survival, with			programmable		
C	changes			devices, sensors		
	(adaptations)			and monitoring.		
p	possibly leading to			They combine their		
e	evolution.			learning to design		
				and make		
				programmable		
				home devices.		