Greenholm Primary School   Programme of Study for SCIENCE

	By the end of **Year 3** children should be able to…	By the end of **Year 4** children should be able to…	Children working at a **mastery level in year 4** should…
Thinking Scientifically	- Record findings using simple scientific language, drawings and labelled diagrams - Report on findings from enquiries - Record findings using drama - Identify differences and similarities related to simple scientific ideas - Gather and record data in a variety of ways to help in answering questions - Report on findings using models - Set up simple practical enquiries, comparative and fair tests - Make accurate measurements using standard units - Record findings using simple scientific language and tables - Report on findings from enquiries - Use results to draw simple conclusions - Ask relevant questions and use enquiries to answer them	- Record findings using simple scientific language, drawings and labelled diagrams - Report on findings including displays and presentations - Gather data - Set up simple practical enquiries, comparative and fair tests - Present data in a variety of ways - Report on findings from enquiries, including presentation of results and conclusions - Use results to draw simple conclusions - Identify differences and similarities related to simple scientific ideas and processes - Identify changes related to simple scientific ideas and processes - Make careful observations - Make systematic observations - Record findings using labelled diagrams and tables - Ask relevant questions and use a scientific enquiry to answer them	

	• Use scientific evidence to answer questions or to support their findings • Take accurate measurements using standard units • Make systematic and careful observations • Identify differences and similarities related to simple scientific processes	• Make systematic and careful observations • Gather and record data to help in answering questions • Report on findings orally • Present data in a variety of ways to help in answering questions • Make accurate measurements using a range of equipment, for example data loggers • Use results to draw simple conclusions and suggest improvements and predictions for setting up further tests • Use straightforward scientific evidence to answer questions or support their findings	
Biology – Animals Including Humans	**Animals Including Humans** • 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	• Describe the simple functions of the basic parts of the digestive system in humans • Identify the different types of teeth in humans and their simple functions	

	• Identify that humans and some other animals have skeletons and muscles for support, protection and movement	• Construct and interpret a variety of food chains, identifying producers, predators and prey	
Biology- Living Things and their Environment	• 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 one another • Identify and name a variety of plants and animals in their habitats, including micro-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	• Revision Y2: 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 • 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	

| Physics- Electricity | | • 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 some common conductors and insulators, and associate metals with being good conductors
• Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
• Identify scientific evidence: talk about how scientific views have developed over time (UpperKS2) | |

Chemistry– States of Matter			• Compare and group materials together, according to whether they are solids, liquids or gases • 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	
Physics– Sound			• Recognise how sounds are made, associating some of them with something vibrating • Recognise that sounds get fainter as the distance from the sound source increases • 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	

Key performance indicators are in BOLD.