Dinnington First School **Science Curriculum** Under review September 2019

	Ongoing	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
		Biology **Animals including humans**	**Chemistry** **Everyday Materials/ Properties of Materials , Rocks , States of Matter**	**Physics** **Living things/habitats** **Light / ,Sound**	**Electricity** **Forces and Magnets** **Seasonal Changes**	**Plants** **Living things and habitats**	**Animals including humans**
Y1	**Working Scientifically** Observe changes across the 4 seasons Variation of day length Naming animals & their young Naming common plants	Identify & name common **animals** inc fish, amphibians, reptiles & birds Carnivores/herbivores omnivores (Plus Seasonal changes - Autumn)	**Identify, name and describe materials** Objects & what they are made from Compare and group materials **(Plus Seasonal changes - Winter)**	Revise naming common **animals**. Describe & compare the structure of a variety of common animals (fish, amphibians, birds & mammals inc pets)	Naming common wild and garden **plants i**nc deciduous and evergreen trees (Seasonal changes - Spring)	Identifying **plant** structure Revising names of common flowering plants & Animals (and their young)	Identify, name and draw the basic parts of the **human** body an say which part of the body is associated with each sense. (Seasonal changes Summer)
Y2	**Working Scientifically** Name a variety of plants and animals and their offspring. Name /describe habitats of a variety of animals and plants.	Notice that **animals inc humans** have **offspring** which grows into adults. Find out and describe **basic needs** of animals.	**Suitability / Changing materials** Identify suitability of a variety of everyday materials inc wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Changing shape of materials	Explore / compare the dif between things that are **living, dead & things that have never been alive**. Identify plants, animals & their **habitats.** Identify suitable **habitats** that meet basic needs of plants and animals.	Identify suitable **habitats** that meet basic needs of plants and animals (ii) Describe how animals obtain their food from plants and other animals using simple **food chain**.	How seeds & bulbs grow / need of **plants** Find out and describe how plants need water, light and suitable temperature to grow	Describe the importance for **humans** of exercising, eating the right amounts of different types of food and hygiene.
Y3	**Working Scientifically**	Identify that **animals inc humans**, need the right types of **nutrition** and that they cannot make their own food; they get nutrition from what they eat.	**Rocks/Fossils** Compare and group together different kinds of rocks Describe in simple terms how fossils are formed and know soil is made from rocks & organic matter	**Light** Dark is the absence of light Reflection from surfaces Shadows	**Forces and Magnets** Compare how things move on different surfaces How magnets attract / repel	Function of parts of different parts of flowering **plants:** roots stem/trunk, leaves & flowers Investigate how water is transported in plants. Life cycle of flowering plant.	Identify that **humans** and some animals have skeletons and muscles for support, protection and movement.
Y4	**Working Scientifically**	**<u>Living Things</u>** Construct and interpret a variety of food chains identifying producers, predators and prey. Classification/ impact on the environment Living things can be grouped in a variety of ways Environments can change and pose a danger to living things.	**<u>States of Matter –</u>** Compare and group materials according to Solids, Liquids and Gases. Observe changes in state due to warming / cooling and measure in ℃ (Celsius) Identify the part played by evaporation and condensation in the water cycle.	**<u>Electricity</u>** Identify common appliances that run on electricity. Construct simple circuits identifying and naming basic parts including cells, wires bulbs. Identify if a circuit will work or not. Recognise how a switch works and construct a working model. Recognise common conductors and insulators	**<u>Sound</u>** Identify how sounds are made associate with something vibrating Recognise vibrations travel through a medium to the ear. Find & investigate Patterns linked to pitch, volume and travelling of sound.		**<u>Animals including Humans</u>** Describe the simple functions of the basic parts of the digestive system in humans. Identify the different types of teeth in humans & simple functions.

Working Scientifically:
Years 1 & 2 Asking **simple questions** and recognising that they can be answered in different ways. **Observing** closely, using simple equipment. Performing simple **tests**. I**dentifying and classifying**. **Using their observations** and ideas to suggest answers to questions. Gathering and r**ecording** data to help in answering questions.
Years 3 & 4 Asking **relevant questions** and using different types of scientific enquiry to answer them. Use straightforward **scientific evidence** to answer questions to support their findings. Make systematic and careful **observations** and where appropriate, taking accurate **measurements** using standard units, using a range of equipment, including thermometers and data loggers. Setting up simple practical **enquiries,** comparative and **fair tests. Identifying** differences, similarities or changes related to simple scientific ideas and processes. **Using results** to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. **Recording** findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Gathering, recording, classifying and presenting **data** in a variety of ways to help in answering questions. **Reporting** on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.