KS2 (Y4) Science Framework

C= Coverage   N = New Learning   R = Recall of prior learning   A – Assessment

Terms	Autumn		Spring		Summer	
	Animals including Humans		Living Things and their Habitats	States of Matter	Sound	Electricity
Weeks						
1	C – Introduction week	C – Animals N – To name the different parts and functions in the digestive system	C – Living things N – To identify different ways of groups living things. R – To use appropriate scientific vocabulary	C – States of Matter N - compare and group materials together, according to whether they are solids, liquids or gases.	C – Sound N - -identify how sounds are made, associating some of them with something vibrating.	C – Electricity N - identify common appliances that run on electricity
2	C – Animals N – To explore a basic food chain	C – Animals R – To name the different parts and functions in the digestive system	C – Living things N – To identify and describe vertebrates	C – States of Matter R - compare and group materials together, according to whether they are solids, liquids or gases.	C – Sound N -recognise that vibrations from sounds travel through a medium to the ear.	C – Electricity N - construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.
3	C – Animals N – To identify the difference between and examples of producers, predators and prey.	C – Animals N – To compare the human digestive system with that of different animals. N – To use appropriate scientific vocabulary	C – Living things N – To identify and describe invertebrates N – To use a key to compare vertebrates and invertebrates	C – States of Matter N – observe that some materials change state when they are heated or cooled.	C –Sound N -recognise that sounds get fainter as the distance from the sound source increases.	C – Electricity R - construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers

4	C – Animals R – To identify the difference between and examples of producers, predators and prey. N – To use appropriate scientific vocabulary	C – Animals N – To identify the names and functions of teeth.	C – Living things N – To use a key to identify different characteristics in living things. R - To use appropriate scientific vocabulary	C – States of Matter N – To research the temperature at which this happens in degrees Celsius (°C)	C – Sound N -find patterns between the volume of a sound and the strength of the vibrations that produced it	C – Electricity N - 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
5	C – Animals N – To interpret a series of food chains R – To use appropriate scientific vocabulary	C – Animals N – To plan a scientific enquiry N – To use appropriate scientific vocabulary	C – Living things N – To understand why animals choose different habitats. N – To explore positive and negative changes to the environment.	C – States of Matter N – To research the temperature at which this happens in degrees Celsius (°C) N – To use appropriate scientific vocabulary.	C – Sounds A - find patterns between the pitch of a sound and features of the object that produced it.	C – Electricity N - recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.
6	C – Animals A – To construct a series of food chain diagrams using arrows to indicate the transfer on energy	C – Animals N – To carry out and record scientific enquiry R - To use appropriate scientific vocabulary	C – Living things N – To identify endangered species and explain how to protect them. R - To use appropriate scientific vocabulary	C – States of Matter N -identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature R – To use appropriate scientific vocabulary		C – Electricity N - recognise some common conductors and insulators, and associate metals with being good conductors. R - To use appropriate scientific vocabulary.
7	C – Animals N – To interpret a food web.	C – Animals N – To write a conclusion for a scientific enquiry R - To use appropriate scientific vocabulary				**Enrichment Week**

8	**Enrichment Week**	
Scientific working skills to be developed across all topics:	o asking relevant questions and using different types of scientific enquiries to answer them o setting up simple practical enquiries, comparative and fair tests o making systematic and careful observations and,where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers o gathering, recording, classifying and presenting data in a variety of ways to help in answering questions o recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables o reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions o using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions o identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.	