## Year 3 Progression Document (Knowledge and Working Scientifically)

Year 3								
Autumn 1	Spring 1	Summer 1						
<ul> <li>Chemistry - Rocks</li> <li>To compare different kinds of rocks based on their appearance and physical properties.</li> <li>To recognise that soils are made from rocks and organic matter.</li> <li>To investigate different types of soils. (2 lessons)</li> <li>To describe how fossils are formed.</li> </ul>	<ul> <li>Biology - Animals including Humans</li> <li>To identify differences and similarities between skeletons.</li> <li>To identify that animals and humans get nutrition from what they eat.</li> <li>To identify that animals and humans need the right type of nutrition.</li> <li>To identify differences and similarities between diets of different animals.</li> <li>To use straightforward scientific evidence to answer questions or to support their findings.</li> </ul>	<ul> <li>Biology - Plants</li> <li>To identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</li> <li>To explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant (2 lessons)</li> <li>To investigate the way in which water is transported within plants</li> <li>To explore the part that flowers play in the life cycle of flowering plants</li> <li>To explore pollination, seed formation and seed dispersal.</li> </ul>						
Autumn 2         Biology - Animals including Humans         • To identify skeletons and muscles on humans.         • To identify skeletons and muscles on animals.         • To understand how the skeleton and muscles support protection and movement.	<ul> <li>Spring 2</li> <li>Physics - Light <ul> <li>To recognise the importance of light and its source.</li> <li>To investigate how light is reflected from surfaces.</li> <li>To explore the dangers of sunlight.</li> <li>To investigate shadow formation.</li> <li>To investigate shadow patterns in the way that the size of shadows change.</li> </ul> </li> </ul>	<ul> <li>Summer 2</li> <li>Physics - Forces and Magnets <ul> <li>To compare how things move on different surfaces.</li> <li>To explore the difference between contact forces and magnetic forces (noticing that some forces need contact between two objects but magnetic forces can act at a distance)</li> <li>To observe how magnets attract or repel each other and some materials.</li> <li>To investigate magnetic materials.</li> <li>To compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet.</li> <li>To describe magnets as having two poles and predict whether two magnets will attract or repel each other depending on which poles are facing.</li> </ul> </li> </ul>						

## Year 3 Progression Document (Knowledge and Working Scientifically)

LKS2 Working Scientifically								
N.C Objective asking relevant questions and	Year 3			Year 4				
	Autumn	Spring	Summer	Autumn	Spring	Summer		
using different types of scientific enquiries to answer them	<ul> <li>Rocks</li> <li>Animals including Humans</li> </ul>	<ul> <li>Light</li> <li>Light</li> </ul>	<ul> <li>Plants</li> <li>Forces and Magnets</li> </ul>	Electricity	Sound	<ul> <li>Animals including Humans</li> <li>States of Matter</li> </ul>		
setting up simple practical enquiries, comparative and fair tests	Rocks	• Light	<ul> <li>Plants</li> <li>Forces and Magnets</li> </ul>	Electricity	Sound	<ul> <li>Animals including Humans</li> <li>States of Matter</li> </ul>		
making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	Rocks	• Light	<ul> <li>Plants</li> <li>Forces and Magnets</li> </ul>	Electricity	• Sound	<ul> <li>Animals including Humans</li> <li>States of Matter</li> </ul>		
gathering, recording, classifying and presenting data in a variety of ways to help in answering questions		• Light	<ul> <li>Plants</li> <li>Forces and Magnets</li> </ul>			<ul> <li>Animals including Humans</li> <li>States of Matter</li> </ul>		
recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	Rocks	• Light	<ul> <li>Plants</li> <li>Forces and Magnets</li> </ul>		• Sound	<ul> <li>Animals including Humans</li> <li>States of Matter</li> </ul>		
reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions	Rocks	<ul> <li>Light</li> <li>Light</li> </ul>	<ul> <li>Plants</li> <li>Forces and Magnets</li> </ul>	Electricity	• Sound	<ul> <li>Animals including Humans</li> <li>States of Matter</li> </ul>		
using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	Rocks	<ul> <li>Light</li> </ul>	<ul> <li>Plants</li> <li>Forces and Magnets</li> </ul>	Electricity	Sound	Animals including     Humans		
identifying differences, similarities or changes related to simple scientific ideas and processes	<ul> <li>Rocks</li> <li>Animals including</li> <li>Humans</li> </ul>	<ul> <li>Light</li> </ul>	<ul> <li>Plants</li> <li>Forces and Magnets</li> </ul>		Sound	States of Matter		
using straightforward scientific evidence to answer questions or to support their findings.	<ul> <li>Rocks</li> <li>Animals including</li> <li>Humans</li> </ul>	<ul> <li>Light</li> <li>Light</li> </ul>	<ul> <li>Plants</li> <li>Forces and Magnets</li> </ul>	Electricity	Sound	<ul> <li>Animals including Humans</li> <li>States of Matter</li> </ul>		