Skills Progression for Science

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working Scientifically						
Planning	Can ask simple questions? Can I ask and answer questions about plants growing in their environment? Can I ask questions about animals in their habitats? Can I ask questions about everyday materials?	Can I ask questions and recognise that they can be answered in different ways? E.g. through research, enquiries or tests. Can I sort and classify living things? Can I ask questions about things all living things do? Can I raise an answer questions about the local environment? Can I ask questions about animals' growth? Can I ask questions about what animals need to survive? Can I ask questions about what humans need to keep healthy?	Can I ask relevant questions? Can I ask questions about the role of the different part of a plant?	Can I ask relevant questions and use different types of scientific enquires to answer them? Can I raise and answer questions based on observation of animals? Can I research the temperature the temperature at which materials change state?	Can I plan different types of scientific enquiries? Can I raise questions about my local environment throughout the year? Can I research the work of naturalists and behaviourists? Can I research how chemists create new materials? Can I find out about the way that ideas about the solar system have changed?	Can I plan different types of scientific enquires to answer questions recognising and controlling variables where new necessary? Can I find out about the significance of the work of Scientist such as Carl Linnaeus in animal classification? Can I research unfamiliar animals and plants from a broad range of habitats? Can I explore and answer questions about the circulatory system? Can I explore how to keep my body healthy? Can I explore the work of scientists and scientific research about the relationship between diet, exercise, drugs, lifestyle and health? Can I explore the work of people such as Mary Anning, Charles Darwin and Alfred Wallace in relation to evolution and inheritance?
Obtaining evidence Observation	Can I observe and tell you what I have noticed? Can I observe the growth of flowers and vegetables I have planted over time? Can I observe plants closely using magnifying glasses? Can I observe animals first hand or through videos or photographs? Can I observe changes in weather and the seasons?	Can I observe closely and use equipment to do so? E.g. hand lenses, egg timers. Can I observe the growth of plants over time with accuracy? Can I observe how plants grow? Can I observe through first hand observation, measurement or video, how animals grow? Can I observe the uses of different materials?	Can I set up simple practical enquires? Can I observe the different stages of plant life cycles over a period of time? Can I observe how water is transported in plants? Can I research different food groups and they keep up healthy? Can I observe rocks? Can I explore how rocks have changed over time?	Can I set up simple practical enquires, comparative and fair tests? Can I use the local environment throughout the year to study plants and animals in their habitats? Can I identify how habitats change throughout the year? Can I observe water as a solid, liquid and gas? Can I observe changes to water when it is heated or cooled? Can I observe evaporation over a period of time?	Can I take measurements; use a range of scientific equipment, with increasing accuracy? Can I observe life-cycle changes in a variety of living things? Can I observe and compare life cycles of plants and animals in their own environments? Can I observe and compare life cycles of plants and animals around the world? Can I observe changes in animals over a period of time?	Can I take measurements; use a range of scientific equipment, with increasing accuracy and repeat readings when appropriate? Can I classify animals into vertebrates and invertebrates through direct observation? Can I observe and question how animas are adapted to their environment?

			Can I research and discuss fossils? Can I look for patterns in what happens to shadows when the light source moves or the distance between the source and the object changes? Can I observe that magnetic forces can act without direct contact?	Can I explore and observe the way sounds is made through vibration? Can I find out how pitch and volume can be changed in a variety of ways? Can I observe patterns related to electricity?	Can I compare the time of day at different places on the Earth?	
Practical	Can I carry out practical tasks? Can I explore and experiment with a wide range of materials? Can I perform simple test to explore questions such as: What material is best for …?	Can I perform simple tests? Can I set up a test to show what plants need to grow? Can I compare uses of everyday materials?	Can I identify and group animals with and without skeletons? Can I use a hand lens or microscope to identify and classify rocks? Can I explore similarities and differences in soils? Can I investigate what happens when rocks are rubbed together? Can I explore what happens when light reflects off a mirror or reflective surfaces? Can I explore the behaviour and everyday uses of different magnets? Can I carry out tests to find out how far things move on different surfaces?	Can I find out what damages teeth? Can I discuss ideas about the digestive system by comparing them with models and images? Can I explore a variety of everyday materials? Can I explore the effect of temperature on different materials? Can I find patterns in the sounds that are made by different objects? Can I investigate which materials make the best insulation against sound? Can I construct simple series circuits? Can I understand precautions for working safely with electricity?	Can I try growing plants from different parts of a plant e.g. seed, stem and root cutting, bulbs etc? Can I research the gestation periods of other animals and compare them to humans? Can I explore and compare the properties of a broad range of materials? Can I explore reversible changes in materials, including those that are difficult to reverse? Can I carry out tests to answer questions about comparing materials? Can I explore falling objects and raise questions about the effects of air resistance? Can I make a variety of parachutes to determine the most effective design?	Can I use classification systems and keys to identify some plants and animals? Can I investigate the relationship between light sources, objects and shadows? Can I use the idea that light appears to travel in straight lines to explain how things like periscopes and rear view mirrors work? Can I extend my experience of light by exploring rainbows, colours on soap bubbles, colour filters or looking at objects in water? Can I construct simple electrical circuits? Can I change one component at a time in a circuit to explore the effect? Can I design and make a useful circuit such as: a set of traffic lights or a burglar alarm?
Measurement	Can I use non standards measurements? E.g. hand spans, cupfuls etc.	Can I begin to use some standard units of measurements? cm for height	Can I begin to make systematic and careful observations and take accurate measurements? Can I look for and measure shadows?	Can I make systematic and careful observations and take accurate measurements? Can I record evaporation over a period of time?	Can I record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs? Can I found and record the length and mass of a baby as it grows? Can I observe that some conductors will produce a brighter bulb?	Can I record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs?
			Can I gather, record, classify and present data in a variety of ways?	Can I gather, record, classify and present data in a variety of ways to help in answering questions? Can I group and classify different materials?	Can I use tests results to make predictions to suggest further comparative and fair tests?	Can I use tests results to make predictions to set up further comparative and fair tests?
Presenting evidence	Can I make a record of what I have seen?	Can I use my observations and ideas to answers questions?	Can I gather and record data to find answers to questions about magnets?	Can I record findings from enquires, including oral and written explanations, displays or	Can I report and present findings from enquires, in oral and written forms such as displays and other	Can I report and present findings from enquires, including conclusions, casual relationships

	Can I draw diagrams showing parts of plants including trees? Can I make tables and charts about the weather? Can I make displays of what happens in the world around them?	Can I record findings using charts? Can I construct simple food chains that include humans? Can I record the growth of plants over time with accuracy? Can I record my findings about uses of materials? Can I gather and record data to help in answering questions?		presentations or results and conclusions? Can I make simple guide or keys to explore and identify local plants and animals? Can I draw circuits as pictorial representations?	presentations? Can I draw a timeline to indicate stages of growth and development in humans? Can I create models of the solar system? Can I construct a shadow clock?	and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations? Can I represent simple circuits in a diagram using recognised symbols?
Considering and evaluating evidence	Can I say what similarities and differences I have noticed to help me answer questions? Can I sort and group? Can I describe how I identify and group animals?	Can I describe how I sorted living things? Can I identify and classify?	Can I use results to draw simple conclusions? Can I observe and compare animal movements? Can I compare and contrast the diets of different animals? Can I compare the effect of different factors on plant growth? Can I how properties of magnets make them useful in everyday life?	Can I use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions? Can I group animals in to vertebrates and invertebrates? Can I group plants into flowering and non-flowering? Can I explore examples of human impact on environments (both positive and negative)? Can I compare the teeth of herbivores and carnivores?	Can I identify scientific evidence that has been used to support or refute ideas or arguments?	Can I identify scientific evidence that has been used to support or refute ideas or arguments?
	Can I say what has changed to help me answer questions?	Can I talk about what I have found out?	Can I use scientific evidence to answer questions?	Can I use straightforward scientific evidence to answer questions to support their findings?		