

Year 3 Units

	Working scientifically	Animals, including humans	Forces and magnets	Plants	Light	Rocks
Children working below age-related expectations will be:	<ul style="list-style-type: none"> Ask questions and suggest scientific ways to answer them Make careful observations, using simple equipment and record them in different ways Perform a simple test and describe the outcome Identify a range of objects and decide how to classify them Apply observations to new areas of learning by suggesting answers to questions Consider different ways to gather and record data 	<ul style="list-style-type: none"> Identifying what animals, including humans, need to survive= Identify that humans and some animals have skeletons and muscles and describe some of their functions eg.for support, protection and movement. 	<ul style="list-style-type: none"> Observe how magnets can cause each other and some materials to move Begin to recognise that magnets have two different poles Group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. Predict whether two magnets will attract or repel each other, depending on which poles are facing. 	<ul style="list-style-type: none"> Identify different parts of flowering plants: roots, stem/trunk, leaves and flowers. Explore the basic requirements of plants for life and growth (air, light, water, nutrients) Investigate with support the way in which water is transported within plants. Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal, with given vocabulary. 	<ul style="list-style-type: none"> Recognise that they need their eyes and light in order to see things. Notice that light is reflected from surfaces...pupils will find this easier with shiny surfaces Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. Recognise that shadows are formed when the light from a light source is blocked by an opaque object. Observe the way that the size of shadows change. 	<ul style="list-style-type: none"> Recognise that all rocks are hard Compare and group together different kinds of rocks on the basis of their appearance. Describe in simple terms using key vocabulary how fossils are formed when things that have lived are trapped within rock. Recognise that soils are made from rocks.
Children working at age-related expectations will:	<p>During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings. 	<ul style="list-style-type: none"> 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 identify that humans and some animals have skeletons and muscles for support, protection and movement. 	<ul style="list-style-type: none"> compare how things move on different surfaces notice that some forces need contact between two objects, but magnetic forces can act at a distance observe how magnets attract or repel each other and attract some materials and not others compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials describe magnets as having two poles predict whether two magnets will attract or repel each other, depending on which poles are facing. 	<ul style="list-style-type: none"> identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers 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 investigate the way in which water is transported within plants explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. 	<ul style="list-style-type: none"> recognise that they need light in order to see things and that dark is the absence of light notice that light is reflected from surfaces recognise that light from the sun can be dangerous and that there are ways to protect their eyes recognise that shadows are formed when the light from a light source is blocked by an opaque object find patterns in the way that the size of shadows change. 	<ul style="list-style-type: none"> compare and group together different kinds of rocks on the basis of their appearance and simple physical properties describe in simple terms how fossils are formed when things that have lived are trapped within rock recognise that soils are made from rocks and organic matter.
Children working above age-related expectations will:	<ul style="list-style-type: none"> asking relevant questions and beginning to plan different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests taking increasingly accurate measurements, using standard units using a range of scientific equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording data and results using scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting findings from enquiries, including conclusions in oral and written forms such as displays using results to draw conclusions, make predictions for new values, suggest improvements and raise further questions identifying differences, similarities or changes related to simple scientific ideas and processes using scientific evidence to answer questions or to support their findings. 	<ul style="list-style-type: none"> 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. Clearly explain what a balanced diet is using the names of foods from the different food groups Identify that humans and some animals have skeletons and muscles for support, protection and movement. Identify what skeletal parts protect which organs of the body. 	<ul style="list-style-type: none"> Explain that some forces need contact between two objects, but magnetic forces are invisible and can act at a distance. Observe how magnets attract or repel each other and attract some materials and not others (Describe these materials as magnetic/non-magnetic). Sort a variety of everyday materials on the basis of whether they think they are magnetic/non-magnetic. Know not all metals are magnetic...only those containing iron/steel. Describe magnets as having a North and South Pole. Predict whether two magnets will attract or repel each other, depending on which poles are facing.. 	<ul style="list-style-type: none"> Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers with consistent use of scientific vocabulary. Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and explain why they often vary from plant to plant. Investigate and begin to explain the way in which water is transported within plants. Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal and be able to explain this process using consistently correct scientific vocabulary. 	<ul style="list-style-type: none"> Recognise that light is needed to enter the eyes in order to see things and that dark is the absence of light. Describe and begin to explain that light is reflected from surfaces and enters the eye to see things. Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. Recognise that shadows are formed when the light from a light source is blocked by an opaque object...begin to explain what happens to the colour of the shadow with translucent objects used to block the light Find patterns and use comparative language to explain the way that the size of shadows change. 	<ul style="list-style-type: none"> Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Pupils may draw on prior knowledge including what they know is made out of certain types of rocks in every day life. Explain in simple terms how fossils are formed when things that have lived are trapped within rock. Recognise that soils are made from rocks and organic matter and describe simply the process.