

Year 3 Science

Working Scientifically	Animals including humans	Plants
<ul style="list-style-type: none"> • ask questions and use different types of scientific enquiries to answer them • set up simple practical enquiries, comparative and fair tests. • make observations and take measurements using standard units, using a range of equipment, including thermometers and data loggers. • gather, record, classify and present data in a variety of ways to help with answering questions. • record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. • report on findings from enquiries, including spoken and written explanations, displays or presentations of results and conclusions. • use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. • explain differences, similarities or changes related to simple scientific ideas and processes. • use straightforward scientific evidence to answer questions or to support my 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 other animals have skeletons and muscles for support, protection and movement. <p><i>Inspirational Person link: Charlotte Armah</i></p>	<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. <p><i>Inspirational Person link: Marie Clark-Taylor (Botanist)</i></p>
Greater depth		
<ul style="list-style-type: none"> ▪ develop relevant, testable questions. ▪ plan investigations using different types of scientific enquiry. ▪ set up comparative and fair tests. ▪ use various equipment, as instructed, repeatedly and with care. ▪ recognise the importance of using standard units and measure accurately. ▪ use words and diagrams to record findings. ▪ use various ways to record, group and display evidence. ▪ write a conclusion based on evidence. ▪ present findings either in writing or orally. ▪ recognise patterns that relate to scientific ideas. ▪ use evidence to produce a simple conclusion. ▪ use evidence to suggest further relevant investigations 	<ul style="list-style-type: none"> ▪ Explain why a varied diet is important. ▪ Compare the ways that the skeletons of different animals provide support, protection and movement. 	<ul style="list-style-type: none"> ▪ Suggest why parts may vary in size and shape from one species of flowering plant to another. ▪ Suggest how this process might vary from one type of plant to another. ▪ Suggest why pollination, seed formation and seed dispersal may vary from one type of plant to another.

Forces and Magnets	Light	Rocks
<ul style="list-style-type: none"> ▪ compare how things move on different surface ▪ 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"> ▪ 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. <p style="color: red; font-style: italic;">Inspirational Person link: Lewis Howard Latimer</p>	<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
Greater depth		
<ul style="list-style-type: none"> ▪ Predict how an object will move on other surfaces and suggest why. ▪ Explore how magnetic attraction and repulsion are affected by distance. ▪ Explore whether some magnets are stronger than others. ▪ Identify some applications of magnets and magnetic materials. ▪ Explore the similarities and differences between the two poles. ▪ Apply ideas about the interaction of magnets to contexts such as toys. 	<ul style="list-style-type: none"> ▪ Recognise that vision involves light travelling to the eyes. ▪ Recognise that some surfaces are better at reflecting light than others. ▪ Explain why sunlight can be dangerous and how types of protection work. ▪ Suggest how light is travelling to form a shadow. ▪ Relate position of an object and position of a screen to the size of the shadow. 	<ul style="list-style-type: none"> ▪ Explain the importance of studying fossils. ▪ Compare different soils in terms of composition. ▪ Suggest uses for different kinds of rocks based on their properties

Types of scientific enquiry

Comparative & fair test

Research using secondary sources

Pattern seeking

Observation over time

Identifying & classifying