

## **Year 3 Science National Curriculum Coverage**

Forces	Magnets	Rocks	Plants	Animals Including Humans	Light
Statutory requirements Children should: compare how things move on different surfaces notice that some forces need contact between two objects,	Statutory requirements Children should:  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.	Statutory requirements Children should:  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.	Statutory requirements Children should:  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.	Statutory requirements Children should:  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.	Statutory requirements Children should:  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
Non-Statutory Pupils should compare how different things move and grouping them; raising questions and carrying out tests to find out how far things move on different surfaces and gathering and recording data to find answers their questions;	Non-Statutory Pupils should observe that magnetic forces can act without direct contact, unlike most forces, where direct contact is necessary (for example, opening a door, pushing a swing).	Non-Statutory Pupils should explore different kinds of rocks and soils, including those in the local environment.  Pupils might work scientifically by: observing rocks, including those used in buildings and gravestones,	Non-Statutory Pupils should be introduced to the relationship between structure and function: the idea that every part has a job to do.  They should explore questions that focus on the role of the roots and stem in	Non-Statutory Pupils should continue to learn about the importance of nutrition and should be introduced to the main body parts associated with the skeleton and muscles, finding out how different parts of the body have special functions.	Non-Statutory Pupils should explore what happens when light reflects off a mirror or other reflective surfaces, including playing mirror games to help them to answer questions about how light behaves.  They should think about why it is important to protect their eyes from



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	They should explore the behaviour and everyday uses of different magnets (for example, bar, ring, button and horseshoe).	and exploring how and why they might have changed over time; using a hand lens or microscope to help them to identify and classify rocks according to whether they have grains or crystals, and whether they have fossils in them.	nutrition and support, leaves for nutrition and flowers for reproduction.	Pupils might work scientifically by: identifying and grouping animals with and without skeletons and observing and comparing their movement; exploring ideas about what would happen if humans did not have skeletons.	bright lights. They should look for, and measure, shadows, and find out how they are formed and what might cause the shadows to change.  Pupils should be warned that it is not safe to look directly at the sun, even when wearing dark glasses.
working Scientifically making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, 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 using straightforward scientific evidence to answer questions or to support their findings.	Working Scientifically 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, setting up simple practical enquiries, comparative and fair tests using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions using straightforward scientific evidence to answer questions or to support their findings.  Pupils might work scientifically by: exploring the strengths of different magnets and finding a fair way to compare them; sorting materials into those that are magnetic and those that are not; looking for patterns in the way that magnets behave in relation to each other and what might affect this, for example, the strength of the magnet or	Working Scientifically making systematic and careful observations asking relevant questions and using different types of scientific enquiries to answer them reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions  Pupils might research and discuss the different kinds of living things whose fossils are found in sedimentary rock and explore how fossils are formed.  Pupils could explore different soils and identify similarities and differences between them and investigate what happens when rocks are rubbed together or what changes occur when they are in water. They can raise and answer questions about the way soils are formed.	Working Scientifically 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.  Pupils might work scientifically by: comparing the effect of different factors on plant growth, for example, the amount of light, the amount of fertiliser; discovering how seeds are formed by observing the different stages of plant life cycles over a period of time; looking for patterns in the structure of fruits that relate	Working Scientifically 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 straightforward scientific evidence to answer questions or to support their findings.  Pupils might compare and contrast the diets of different animals (including their pets) and decide ways of grouping them according to what they eat. They might research different food groups and how they keep us healthy and design meals based on what they find out.  Diets of different animals (including their pets) and decide ways of grouping them according to what	working Scientifically making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, setting up simple practical enquiries, comparative and fair tests 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



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which pole faces another;	to how the seeds are	they eat. They might research	
identifying how these	dispersed.	different food groups and how they	
properties make magnets		keep us healthy and design meals	
useful in everyday items and	They might observe how	based on what they find out.	
suggesting creative uses for	water is transported in		
different magnets.	plants, for example, by		
	putting cut, white carnations		
	into coloured water and		
	observing how water travels		
	up the stem to the flowers.		