

Year 3 Science

Plants	Animals including humans	Rocks	Light	Forces
P1 I can identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.	A1 I can 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.	R1 I can compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.	L1 I can recognise that they need light in order to see things and that dark is the absence of light. I can notice that light is reflected from surfaces.	F1 I can compare how things move on different surfaces.
P2 I can 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.	A2 I can identify that humans and some other animals have skeletons and muscles for support, protection and movement.	R2 I can describe in simple terms how fossils are formed when things that have lived are trapped within rock.	L2 I can recognise that light from the sun can be dangerous and that there are ways to protect their eyes.	F2 I can identify that some forces need contact between 2 objects, but magnetic forces can act at a distance.
P3 I can investigate the way in which water is transported within plants.		R3 I can recognise that soils are made from rocks and organic matter.	L3 I can recognise that shadows are formed when the light from a light source is blocked by a solid object.	F3 I can observe how magnets attract or repel each other and attract some materials and not others.
P4 I can explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.			L4 I can find patterns in the way that the size of shadows change.	F4 I can 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.
				F5 I can describe magnets as having 2 poles.
				F6 I can predict whether 2 magnets will attract or repel each other, depending on which poles are facing.

Topic coverage

Autumn 1: Stone Age	Autumn 2: Stone Age	Spring 1: Ancient Egypt	Spring 2: Ancient Egypt	Summer 1: Circus	Summer 2: The Potteries
R1	A1	F1	F4	L1	P1
R2	A2	F2	F5	L2	P2
R3		F3	F6	L3	P3
				L4	P4
Vocabulary					
<p><u>Rocks & soils</u></p> <p>Sandstone, limestone, granite, marble, pumice, slate, crystals, properties, permeable /impermeable, hardness, sedimentary, igneous, metamorphic, fossils, soil, organic matter, humus</p>	<p><u>Animals including humans</u></p> <p>Bones, muscles, skull, ribs, skeleton, support, protection, movement, herbivore, carnivore, omnivore, teeth, canine, incisor, molar, diet</p>	<p><u>Forces & Magnets</u></p> <p>Force, push, pull, contact, magnetic, attract, repel, poles (north / south) Friction, resistance, surfaces</p>	<p><u>Forces & Magnets</u></p> <p>Force, push, pull, contact, magnetic, attract, repel, poles (north / south) Friction, resistance, surfaces</p>	<p><u>Light</u></p> <p>Light, dark, shadows, blocking, mirror, reflect, reflective, reflection, absence of light Protect eyes from the sun, transparent, translucent.</p>	<p><u>Plants</u></p> <p>Air, light, water, soil, nutrients, reproduction, seed formation, dispersal, germination, pollination, transportation, species, location (photosynthesis) Review Y2 Flower, stem, roots, leaf, sepal, filament, anther, pollen, petal, stigma, style, ovary, ovule</p>
Working Scientifically Vocabulary					
Investigation cycle, Question, prediction, method, etc.(see below)					

Research - relevant questions, scientific enquiry, comparative and fair test, systematic, careful observation, accurate measurements.

Equipment - thermometer, data logger,

Data - gather, record, classify, present

Plan - variables, measurements, accuracy, precision, repeat readings,

Report data - scientific diagrams, labels, classification keys, tables, scatter graphs, bar graph and line graphs, predictions, further comparative and fair test,

Report and present - conclusions, causal relationship, explanations, degree of trust, oral and written display and presentation.

Evidence - support, refute ideas or arguments identify, classify and describe patterns, systematic, quantitative, measurements.

I will know..

<u>Rocks & soils</u>	<u>Animals including humans</u>	<u>Forces & Magnets</u>	<u>Light</u>	<u>Plants</u>
<ul style="list-style-type: none"> - how to compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. - what sedimentary means - what metamorphic means - what igneous - how fossils are formed when things that have 	<ul style="list-style-type: none"> - that animals, including humans, need the right types and amount of nutrition - that they cannot make their own food; they get nutrition from what they eat - how to use the investigation cycle - how to record my findings in 	<ul style="list-style-type: none"> - how things move on different surfaces. - that some forces need contact between 2 objects, but magnetic forces can act at a distance - what repel means - what attract means - how magnets attract or repel each other and attract some materials and not others 	<ul style="list-style-type: none"> - I need light to see things - that dark is the absence of light - that light is reflected from surfaces - that light from the sun can be dangerous - that there are ways to protect my eyes - that shadows are formed when the light 	<ul style="list-style-type: none"> - how to describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers - the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) - how to investigate the way in which

<p>lived are trapped within rock</p> <ul style="list-style-type: none"> - recognise that soils are made from rocks and organic matter - how to use the investigation cycle - how to record my findings in different ways and evaluate what I find out - the appropriate scientific vocabulary and will be able to confidently read, write and apply this in my work 	<p>different ways and evaluate what I find out</p> <ul style="list-style-type: none"> - the appropriate scientific vocabulary and will be able to confidently read, write and apply this in my work 	<ul style="list-style-type: none"> - how to 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. - that magnets have 2 poles - whether 2 magnets will attract or repel each other, depending on which poles are facing - how to use the investigation cycle - how to record my findings in different ways and evaluate what I find out - the appropriate scientific vocabulary and will 	<p>from a light source is blocked by a solid object</p> <ul style="list-style-type: none"> - how to investigate patterns in the way that the size of shadows change - how to use the investigation cycle - how to record my findings in different ways and evaluate what I find out - the appropriate scientific vocabulary and will be able to confidently read, write and apply this in my work 	<p>water is transported within plants</p> <ul style="list-style-type: none"> - the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. - how to use the investigation cycle - how to record my findings in different ways and evaluate what I find out - the appropriate scientific vocabulary and will be able to confidently read, write and apply this in my work
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