

Science



Y3	Forces and magnets			Resources
Autumn 1	<u>Scientific vocabulary:</u> forces, magnetic force, attract, repel, magnetic materials, contact, magnetic poles, friction, resist/resistance			
Science skills Developed through: • Observing over time • Identifying, grouping and classifying • Pattern Seeking • Making and developing ideas • Comparative and fair testing • Researching using secondary sources • Drawing conclusions and making predictions	What we want children to know:			
	Focus scientists		Stem careers:	
	• 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.		• Sir Isaac Newton • The Wright Brothers • Shoe designer • Train driver • Radiologist (MRI)	
	Skills •		Assessment	

Science



Y3 Autumn 2	Animals, including humans			Resources
	<u>Scientific vocabulary:</u> nutrition, nutrients, skeleton, muscles, support, protection, protein, carbohydrates			
Science skills Developed through: • Observing over time • Identifying, grouping and classifying • Pattern Seeking • Making and developing ideas • Comparative and fair testing • Researching using secondary sources • Drawing conclusions and making predictions	What we want children to know:		Focus scientists	Stem careers
	• 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.		• Dr Nina Tandon • David Attenborough • Chris Packham	• nutritionist • radiologist (X-ray) • physiotherapist
	Skills • Identifying, grouping and classifying		Assessment	

Science



Y3 Spring 1	Rocks		Resources
	<u>Scientific vocabulary:</u> rocks, physical properties, fossil, soil, organic matter, organism, sedimentary, metamorphic, igneous		
Science skills Developed through: • Observing over time • Identifying, grouping and classifying • Pattern Seeking • Making and developing ideas • Comparative and fair testing • Researching using secondary sources • Drawing conclusions and making predictions	What we want children to know:		
	Focus scientists		
	Stem careers:		
	• 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.	• Mary Anning • Johann Joachim Winckelmann	• Geologist • Palaeontologist • Archaeologist
	Skills • Identifying, grouping and classifying	Assessment	

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Y3 Spring 2	Plants	Resources
	<u>Scientific vocabulary:</u> roots, stem/trunk, leaves, flowers, transportation, pollination, seed formation	
Science skills Developed through: • Observing over time • Identifying, grouping and classifying • Pattern Seeking • Making and developing ideas • Comparative and fair testing • Researching using secondary sources • Drawing conclusions and making predictions	What we want children to know: Focus scientists Stem careers: • 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. • Arit Anderson • Tom Hart Dyke • Poppy Okotcha • Forester • Conversationalist • Nursery worker Skills • Observing over time Assessment	

Science



Y3 Summer 1 and 2	Light		Resources
	<u>Scientific vocabulary:</u> reflect/reflection, opaque, transparent, translucent, shadow, block, source, luminous, natural/artificial		
Science skills Developed through: • Observing over time • Identifying, grouping and classifying • Pattern Seeking • Comparative and fair testing • Researching using secondary sources • Drawing conclusions and making predictions	What we want children to know:		
	Focus scientists		
	Stem careers:		
	• 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.	• Patricia Bath • Astronomer Christiaan Huygens	• Optician • Photographer • Lightning technician
	Skills	Assessment	
	• Pattern-seeking		