Ready, Respectful, Safe

Science Overview

Cathcart Street Primary School 2023-2024

	Autumn	Spring	Summer
Science – Year 3	**Year 3 NC Objectives**	**Year 3 NC Objectives**	**Year 3 NC Objectives**
	Rocks Pupils should be taught to: • 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 • Scientist Mary Anning) NB: Make link between soil and plants	**Forces and Magnets** Pupils should be taught to: • 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	**Animals including Humans – Movement and Nutrition** • identify that humans and some other animals have skeletons and muscles for support, protection and movement • 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 NB: Make link between PSHE **Light** Pupils should be taught to: • 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
	Ongoing **Plants** • 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.		
	Year 3 **Key Learning**	**Year 3** **Key Learning**	**Year 3** **Key Learning**
	Rocks - Chemistry • To compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.	**Forces and Magnets:** (Prior Learning from KS1: Know how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching)	**Animals including Humans** **Movement** • To be able to name some bones that make up their skeleton giving examples that support, help them move or provide protection.

	• To know that soils are made up of pieces of ground- down rock which may be mixed with plant and animal material (organic matter). • To know that some rocks contain fossils which were formed millions of years ago. • To describe in simple terms how fossils are formed when things that have lived are trapped within rock.	• To compare how things move on different surfaces. • To be able to explain how the texture of a surface affects the movement of an object - friction. • To be able to identify forces that need contact and know that magnetic forces can act at a distance. **Plants** • identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers • explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	• To be able to describe how muscles and joints help them to move. **Light:** (Prior Learning from KS1: identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense- Know that the eyes are associated with sight)
Working Scientifically	**Rocks** • To make careful observations of rocks using hand lenses/ microscope to classify them. Plants: • 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	Forces • To observe how magnets attract or repel each other and attract some materials and not others. • To select from a range of resources to gather evidence to answer questions • To use their evidence to suggest values for different items tested using the same method	**Animals inc Humans** • To interpret their date to generate simple comparative statements based on their evidence. • To interpret their date to generate simple comparative statements based on their evidence. **Light** • To make simple predictions based on prior scientific knowledge. • To find patterns in the way that the size of shadows change.
Vocabulary	**Key vocabulary (Rocks)** fossil, permeable, impermeable, durable, igneous, sedimentary, metamorphic, sediment, organic matter	**Key Vocabulary (Forces and Magnets)** Magnetic, force, attract, repel, magnetic field poles, north pole, south pole, friction,	**Key Vocabulary (Animals inc Humans)** Nutrition, fibre, calcium, iron, Skeleton endoskeleton, exoskeleton, muscle, contract, relax **Key Vocabulary (Animals inc Humans)** Nutrition, fibre, calcium, iron, **Key Vocabulary (Light)** light source, Reflection, transparent, translucent, opaque,
	Key Vocabulary (Plants) photosynthesis, reproduction, transportation, seed dispersal, pollination, germination,		