

Rockmount Primary School Subject Curriculum Map Science

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Nursery	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Getting to Know Each Other Children will: <ul style="list-style-type: none"> begin to understand 'why' questions, like: "Why do we have different coloured eyes?" use all their senses in hands-on exploration of natural materials explore collections of materials with similar and/or different properties 	Autumn Is All Around Children will: <ul style="list-style-type: none"> make healthy choices about food, drink, activity and toothbrushing talk about what they see, using a wide vocabulary. begin to make sense of their own life-story and family's history explore how things work 	Passport Around the World Children will: <ul style="list-style-type: none"> understand 'why' questions, like: "Why do you think camels live in the desert?" 	Jurassic Journey Children will: <ul style="list-style-type: none"> plant seeds and care for growing plants understand the key features of the life cycle of a plant and an animal 	Under the Sea Children will: <ul style="list-style-type: none"> explore and talk about different forces they can feel talk about the differences between materials and changes they notice 	What's Up There? (Space) Children will: <ul style="list-style-type: none"> explore how things work begin to understand the need to respect and care for the natural environment and all living things
Reception	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	The Wonderful World of Fairy Tales Children will: <ul style="list-style-type: none"> learn new vocabulary ask questions to find out more and to check what has been said to them articulate their ideas and thoughts in well-formed sentences describe events in some detail 	Food and Festivals Children will: <ul style="list-style-type: none"> use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen use new vocabulary in different contexts know and talk about the different factors that support their overall health and wellbeing: <ul style="list-style-type: none"> regular physical activity healthy eating toothbrushing sensible amounts of 'screen time' having a good sleep routine being a safe pedestrian 	Superheroes and People who Help us Children will: <ul style="list-style-type: none"> explore the natural world around them describe what they see, hear and feel while they are outside recognise some environments that are different to the one in which they live 	Spring and New Life Children will: <ul style="list-style-type: none"> explore the natural world around them, making observations and drawing pictures of animals and plants understand the effect of changing seasons on the natural world around them make comments about what they have heard and ask questions to clarify their understanding manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices 	Animals Children will: <ul style="list-style-type: none"> explore the natural world around them, making observations and drawing pictures of animals and plants. understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. 	Water Children will: <ul style="list-style-type: none"> know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.
Year 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Introduction to seasonal changes Autumn/Winter (linked to Geography) Children will be taught to: <ul style="list-style-type: none"> observe changes across the 4 seasons observe and describe the weather associated with the seasons and how the length of the day varies 	Animals including humans Children will be taught to: <ul style="list-style-type: none"> identify and name basic parts of the human body (Lessons 1-3 Plymouth Science) 	Materials Children will be taught to: <ul style="list-style-type: none"> distinguish between an object and what it is made of identify and name a variety of everyday materials describe the simple properties of a variety of everyday materials compare and group together a variety of everyday materials based on their simple properties 	Plants Children will be taught to: <ul style="list-style-type: none"> identify and name a variety of common wild and garden plants identify and describe the basic structure of a variety of common flowering plants and trees 	Seasonal Changes Continued Children will be taught to: <ul style="list-style-type: none"> observe changes across the 4 seasons observe and describe the weather associated with the seasons and how the length of the day varies 	Animals including humans Children will be taught to: <ul style="list-style-type: none"> identify and name a variety of common animals identify carnivores, herbivores and omnivores describe and compare the structure of a variety of common animals (Lessons 4-12 Plymouth Science)

Year 2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Theme/Topic	Living things & their habitats		Uses of Everyday Materials	Animals including humans	Plants	
	<p>Children will be taught to:</p> <ul style="list-style-type: none"> explore and compare the differences between things that are living, dead and things that have never been alive identify that most living things live in habitats and describe how different habitats provide for the basic needs of different kinds of creatures identify and name a variety of plants and animals in their habitats, including micro habitats describe how animals obtain their food from plants and other animals, using the idea of a simple food chain 		<p>Children will be taught to:</p> <ul style="list-style-type: none"> identify and compare the suitability of a variety of everyday materials for particular uses find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching 	<p>Children will be taught to:</p> <ul style="list-style-type: none"> notice that animals including humans have offspring which grow into adults find out about and describe the basic needs of animals for survival describe the importance for humans of exercise, eating the right amount of different types of food and hygiene. 	<p>Children will be taught to:</p> <ul style="list-style-type: none"> observe and describe how seeds and bulbs grow into mature plants find out how plants need water, light and a suitable temperature to grow and stay healthy 	
Year 3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Theme/Topic	Rocks and soils	Forces and magnets	Animals including humans		Light	Plants
	<p>Children will be taught to:</p> <ul style="list-style-type: none"> compare and group different kinds of rocks based on their appearance and simple physical properties describe in simple terms how fossils are formed <p>recognise that soils are made up from rocks and organic matter</p>	<p>Children will be taught to:</p> <ul style="list-style-type: none"> compare how things move on different surfaces notice that some forces need contact between 2 objects but magnetic forces can act at a distance observe how magnets can attract and repel each other and some materials but not others compare and group materials based on whether they are attracted to a magnet describe magnets as having 2 poles predict whether 2 magnets will attract or repel depending on their poles 	<p>Children will be taught to:</p> <ul style="list-style-type: none"> identify that animals including humans, need the right types and amounts of nutrition and that they cannot make their own food identify that humans and some other animals have skeletons and muscles for support, protection and movement 		<p>Children will be taught to:</p> <ul style="list-style-type: none"> recognise that they need light to see things and dark is the absence of light notice that light is reflected from surfaces recognise that light from the sun can be dangerous and there are ways to protect their eyes recognise that shadows are formed when light is blocked find patterns in the way that the size of the shadow changes 	<p>Children will be taught to:</p> <ul style="list-style-type: none"> identify and describe the functions of different parts of a flowering plant explore the requirements of plants for life and growth and how they vary from plants to plant investigate the way in which water is transported within a plant explore the part that flowers play in the life cycle of flowering plants
Year 4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Theme/Topic	Electricity	Materials-States of matter	Living things and their habitats		Animals including humans	Sound
	<p>Children will be taught to:</p> <ul style="list-style-type: none"> identify common appliances that run on electricity construct a simple series electrical circuit, identifying and naming its basic parts identify whether or not a lamp will light in a simple series circuit, based on whether it is part of a complete loop with a battery recognise that a switch opens and closes a circuit recognise some common conductors and insulators 	<p>Children will be taught to:</p> <ul style="list-style-type: none"> compare and group materials together according to whether they are solids, liquids or gases observe that some materials change state when they are heated up or cooled down identify the part played by condensation and evaporation in the water cycle and associate the rate of evaporation with temperature 	<p>Children will be taught to:</p> <ul style="list-style-type: none"> recognise that living things can be grouped in a variety of ways explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment recognise that environments can change and that this can sometimes pose dangers to living things 		<p>Children will be taught to:</p> <ul style="list-style-type: none"> describe the simple functions of the basic parts of the human digestive system identify different types of teeth in humans and their function construct and interpret a variety of food chains 	<p>Children will be taught to:</p> <ul style="list-style-type: none"> identify how sounds are made, associating some of them with vibrating recognise that vibrations from sound travel through a medium to the ear find a pattern between the pitch of a sound and the features of the object that produced it find a pattern between the volume of a sound and the strength of the vibrations that produced it recognise that sounds get fainter as the distance from the sound increases

Year 5	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Earth in Space Children will be taught to: <ul style="list-style-type: none"> describe the movement of the Earth, and other planets, relative to the sun in the solar system describe the movement of the Moon in relation to the Earth describe the Sun, Moon and Earth as spherical bodies use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky 	Properties and changes of materials Children will be taught to: <ul style="list-style-type: none"> compare and group together everyday materials on the basis of their properties know that some materials will dissolve in a liquid to form a solution use knowledge of solids, liquids and gases to decide how mixtures might be separated give reasons based on evidence from comparative and fair testing for the particular uses of everyday materials demonstrate that dissolving, mixing and changes of state are reversible changes explain that some changes result in the formation of new materials 	Living things and life cycles Children will be taught to: <ul style="list-style-type: none"> describe the differences in the life cycles of a mammal, an amphibian, an insect and bird describe the life process of reproduction in some plants and animals 		Forces Children will be taught to: <ul style="list-style-type: none"> explain that unsupported objects fall towards the Earth because of the force of gravity identify the effects of air resistance, water resistance and friction that act between moving surfaces recognise that some mechanisms, including levers, pulleys, and gears allow a smaller force to have a greater affect 	Animals including humans Children will be taught to: <ul style="list-style-type: none"> describe the changes as humans develop to old age
Year 6	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Light Children will be taught to: <ul style="list-style-type: none"> recognise that light appears to travel in straight lines use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light# explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them 	Electricity Children will be taught to: <ul style="list-style-type: none"> associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit compare and give reasons for variations in how components function use recognised symbols when representing a simple circuit diagram 	Animals and their habitats Children will be taught to: <ul style="list-style-type: none"> describe how living things are classified into broad groups according to common, observable characteristics and based on similarities and differences give reasons for classifying plants and animals based on specific characteristics 	Evolution Children will be taught to: <ul style="list-style-type: none"> recognise that living things have changed over time and that fossils provide information about living things from long ago recognise that living things produce offspring of the same kind, but normally offspring vary and are different from their parents identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution 		Animals including humans Children will be taught to: <ul style="list-style-type: none"> identify and name the main parts of the human circulatory system and describe the function of the heart, the blood vessels and the blood recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function describe ways in which nutrients and water are transported in animals and humans