

Science Overview

	Autumn 1 Health	Autumn 2 Health	Spring 1 Physical Science	Spring 2 Plants and Food	Summer 1 Animals and Habitats	Summer 2 Plants and Food
EYFS	To know how to manage my own basic hygiene when going to the toilet. To know why we wash and drying hands.	To know how my body will change as I grow. To know the importance of good health of physical exercise.	To notice similarities and differences between materials. To identify objects that float and sink. To explore light and dark To visit a park and explore the habitats		To make observations of plants	To know that some plants grow food To recognise and categorise different animals within the local area and on a park To visit a park
Y1	To name external body parts and their functions. To know that underneath our underwear we have private parts. To understand why I need to clean my teeth.	To identify hazards around me. To know how to get help if someone is hurt. To know why we sometimes take medicine To know that we sometimes visit doctors and hospitals when unwell or hurt.	To explore and identify the properties of their materials and their uses. To group materials into recyclable and non-recyclable. To explore light and dark	To care for an indoor plant (sustainability, creating pots in DT) To explore where food comes from (link to healthy eating) To visit a butcher or grocers	To visit a farm To recognise and categorise different animals within the local area and on a farm. To explore diets of familiar animals. To know that some animals eat meat and others do not.	To observe changes in plants over the year To name basic parts of a plant. (ART) To grow a plant. (sustainability) To know that some plants grow inside

	<p>To understand why I need to wash my body. To recognise that my body feels different during and after exercise. To know the importance of eating fruit and vegetables. (FT – Fruit salads)</p>	<p>To know that I should ask a grown up before eating unknown foods To observe changes in plants over the year</p>	<p>To research a scientist.</p>	<p>To observe changes in plants over the year</p>		<p>and outside environments.</p>
Y2	<p>To know that I've changed since birth. To know that I will continue to change. To identify changes between female and male animal bodies including humans. To identify what animals, including humans, need to survive (FT) To describe the changes during and after exercise. (PE) To know that looking after my body is important.</p>	<p>To explore how germs spread when I don't wash my hands To know the benefits of good oral hygiene and dental flossing. To know how to call emergency services To know how and when to use the recovery position. To know asthma pumps are type of medication To identify some hazardous substances. To compare plants in the local area during different seasons (To visit a park)</p>	<p>To explore simple electrical circuits To understand how electricity is created To link keeping safe (health) to electricity To research a scientist.</p>	<p>To care for an outdoor plant. To identify the basic needs of a plant. To know that some food grows in the ground, off a tree or a vine. To compare plants in the local area during different seasons (To visit a park)</p>	<p>To name and categorise animals that live in a local garden or pond. To visit a pond. To create a habitat for a minibeast. To notice that animals, including humans, have offspring To know that some animals use their nipples to feed their young. To know how to keep myself safe whilst in the sun.</p>	<p>To grow a fruit or vegetable. (Sustainability) To know how crops are harvested To compare plants in the local area during different seasons (To visit a park)</p>

	To know how to keep myself safe whilst in the sun. (repeat in summer)					
Y3	<p>To identify animals including humans, they need the right types and amount of nutrition/hydration</p> <p>To create a range of healthy meals</p> <p>To identify that animals cannot make their own food, they need nutrients from what they eat.</p> <p>To understand the importance of exercise in to daily and weekly routine</p> <p>To know that some animals have muscles for movement</p> <p>To explore how muscles, change as a result of regular exercise</p>	<p>To understand the importance of sufficient and good quality sleep for good health</p> <p>To understand a lack of sleep can affect weight, mood and ability to learn.</p> <p>To know regular eye checks are part of a healthy lifestyle</p> <p>To know how to treat burns and scolds</p> <p>To know the effects and risks of smoking</p> <p>To know some of the allergies within our class</p> <p>To name external body parts: genitalia, vulva and penis</p>	<p>To investigate friction</p> <p>To explore magnetic forces</p> <p>To research a scientist.</p>	<p>To grow a plant in which you can see the bulb and roots. (aspidistra)</p> <p>To label parts of the plants that grow underground.</p> <p>To explore the impacts of light and water on different plants.</p> <p>To compare vegetarian/vegan diets to meat diets</p>	<p>To visit a zoo/ adaptation</p> <p>To explore and recognise animals have evolved and adapted for environment</p> <p>To explore the dietary requirements of different animals</p> <p>To identify common food chains</p>	<p>To visit different environments in which plants exists and explore the conditions.</p> <p>To explore how water is transported within plants.</p> <p>To design a bed or planter relevant to the conditions of the environment.</p> <p>To plan a project which aims to reduce food waste</p>

Y4	<p>To explore circulatory systems To describe simple functions of the digestive system. To explore how nutrients are transported around body. To know that skeleton supports and protects the body To know how nutrition impacts the skeleton To know that adrenaline is created during exercise To understand the effects of adrenaline</p>	<p>To explore the impact of sugar and addiction on the human body To explore tooth decay To know how to reduce the risk of sun damage To know how to treat head injuries, heart attacks and strokes. To know what an allergic reaction is. To know the effects and risks of alcohol To name external body parts: testicles, scrotum and breasts. To know puberty is when the body begins preparing for adulthood. To identify the early stages of puberty.</p> <p>Content to including bodies growing thicker hair(including pubic); sweating more; body changing shape (including breasts); spots, feelings change; greasy</p>	<p>To investigate solids, liquids and gases To explore the water cycle To explore sound, including pitch, vibration, muffling and travelling To know regular hearing checks are part of a healthy lifestyle</p>	<p>To categorise plants into categories such as flowering, non-flowering, ferns and mosses. To visit environments in which the above can be found. To design a bed that will flower throughout the year. To research a scientist.</p>	<p>To explore how environments can change over time. To explore and visit different environments: local, marines, wider world. To explore how humans' impact on the environment. To explore the impact of removing part of a food chain.</p>	<p>To understand how seeds are dispersed. To know how Fair Trade supports local farmers. To discuss the impact of meat free diets.</p>
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		hair; oily skin; genital areas grow and develop				
Y5	<p>To explore the science linked to the physical and emotional changes I feel after exercise. To know the risk associated with inactive lifestyles including obesity.</p> <p>To know how my health impacts my learning.</p> <p>To recognise early signs of physical illness such as weight loss and unexplained changes to the body.</p> <p>To know how and when to seek support if worried about health.</p> <p>To know the characteristics of a poor diet.</p> <p>To explore the risks associated with unhealthy eating.</p>	<p>To explore how physical health impacts my emotional health</p> <p>To explore how lack of sleep affects the body.</p> <p>To know how to help someone who is choking</p> <p>To identify legal and illegal drugs</p> <p>To describe the changes as humans develop to old age including puberty.</p> <p>To explore importance of hygiene during puberty</p> <p>Puberty changes for males: shoulders get thicker, muscles grow, the voice gets deeper and 'breaks; facial hair and chest hair grow; sperm and semen start being produced; erections might happen; wet dreams might happen; the testicles might 'drop'</p> <p>Puberty changes for females: menstruation; ovaries begin releasing</p>	<p>To investigate different materials and their properties.</p> <p>To investigate chemical and physical changes.</p> <p>To explore the movement of the earth and other planets in relation to the sun.</p> <p>To explore light and shadows.</p> <p>To know how seasons are formed</p> <p>To explore the forces of gravity and air resistance.</p> <p>To visit either the Science Museum: Wonder lab? (forces) or the Planetarium? (earth, moon, sun)</p>	<p>To explore the lifecycle of a plant</p> <p>To observe life cycle changes in a variety of plants, such as a vegetable garden and flowering plants.</p> <p>To research a scientist.</p>	<p>To describe and compare different life cycles.</p> <p>To recognise that living things produce offspring of the same kind, but normally offspring do vary and are not identical to the parents.</p> <p>To understand the reproduction system in animals, including mammals.</p> <p>Vocabulary: reproductive organs; ovaries; fallopian tube; ovum; erection; semen/sperm; ejaculation; pregnancy; conception; embryo; vulva, genitals, vagina, penis, scrotum, pubic area, nipples,</p>	<p>To explore how food ends up in a supermarket.</p> <p>To understand how food is preserved.</p> <p>To explore nutrients in different food diets.</p>

		eggs; nipples might darken; discharge might start; bones get heavier; the voice might break a little Puberty changes to both male and female bodies: feelings towards each other might change and can develop 'fancying someone'; moods and emotions can change a lot.				
Y6	To understand calories and the nutritional	To understand the risk and the law regarding cannabis and VSA.	To investigate how electrical circuits	To explore the effects of having	To recognise that living things have evolved over time.	To classify plants To explore ways to improve protein intake

<p>content within different foods.</p> <p>To know how germs including bacteria and viruses are spread and treated.</p> <p>To understand facts and science relate to immunisation and vaccination.</p> <p>To understand the functions of the brain and nervous system.</p> <p>To understand how my brain changes whilst learning.</p> <p>To reduce the risk of sun damage including skin cancer.</p>	<p>To know how to get help, advice and support for drug abuse.</p> <p>To explore the science linked to the long-term physical and emotional effects of a healthy lifestyle.</p> <p>To know how and when to administer CPR</p>	<p>work around the home.</p> <p>To create an electrical circuit for a purpose.</p> <p>To explore alternative forms of energy.</p> <p>To explore brightness of lamps or volume of a buzzer with the number of voltage of cells.</p>	<p>no plants upon the planet.</p> <p>To understand the benefits of home grown produce, including nutritional value and limited use of pesticides.</p> <p>To research a scientist.</p>	<p>To know that fossils provided information about living things that inhabited the earth millions of years ago</p> <p>To understand how puberty links to reproduction.</p> <p>To understand the reproduction system in humans (non-statutory)</p> <p>To know humans must consent to reproduction (non-statutory)</p> <p>Vocabually: same as Y5</p>	<p>To care for the plants within the school, responding to the needs of the environment at different points in the year.</p>
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