

Science - Units of work

**For full details of knowledge, skills and vocabulary please ask to see our Scheme of work.*

Autumn 1 term

EYFS	Year 1	Year 1/2	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Animals including humans Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p>	<p>Animals including humans Identify, name, draw and label the basic parts of the human body and the senses. Know the basic needs of animals, including humans, for survival.</p>	<p>Everyday materials Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</p>	<p>Animals including humans Identify that animals, including humans, need the right 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>	<p>Sound Identify how sounds are made. Recognise that vibrations from sounds travel through to the ear. Find patterns between the pitch and volume of a sound..</p>	<p>Earth and space Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p>	<p>Light Use the idea and explain that light travels in straight lines, we see objects because they reflect light and explain why shadows have the same shape as the objects that cast them.</p>

Autumn 2 term

EYFS	Year 1	Year 1/2	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Everyday Materials What is an object made from? 5 basic materials and their properties.</p>	<p>Everyday Materials Name the basic materials and their properties. Compare the suitability of materials for particular uses.</p>	<p>Animals including humans Describe the importance for humans of exercise, eating food and hygiene. Know the basic needs of animals, including humans, for survival.</p>	<p>Rocks Compare and group together rocks on the basis of their appearance and simple physical properties describe how fossils are formed.</p>	<p>States of matter Compare and group materials together, according to whether they are solids, liquids or gases Observe that some materials change state</p>	<p>Forces Explain how objects fall due to gravity. Identify the effects of air resistance, water resistance and friction. recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p>	<p>Electricity 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. Recognise symbols when representing a simple circuit in a diagram.</p>

Spring 1 term

EYFS	Year 1	Year 1/2	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Seasonal changes</p> <p>Observe changes across the four seasons</p>	<p>Seasonal changes</p> <p>Animals including humans Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p>	<p>Everyday materials</p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p>	<p>Light</p> <p>Recognise that they need light in order to see things and that dark is the absence of light. Notice that light from the sun can be dangerous and that there are ways to protect their eyes. Learn and explain how shadows are formed. find patterns in the</p>	<p>Electricity</p> <p>Identify appliances that use electricity. Construct a simple electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. Recognise some common conductors and insulators. .</p>	<p>Living things and their habitats</p> <p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals.</p>	<p>Evolution and inheritance</p> <p>Recognise that living things have changed over time and that fossils provide information about living things from millions of years ago. Recognise that offspring vary and are not identical to their parents. Identify how animals and plants are adapted to suit their environment.</p>

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Spring 2 term

EYFS	Year 1	Year 1/2	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Animals including humans</p> <p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p>	<p>Living things and their habitats</p> <p>Identify that most living things live in different habitats that provide for the basic needs of animals and plants, and how they depend on each other. Identify and name a variety of plants and animals in their habitats, including micro-habitats.</p>	<p>Living things and their habitats</p> <p>Identify that most living things live in different habitats that provide for the basic needs of animals and plants, and how they depend on each other. Identify and name a variety of plants and animals in their habitats, including micro-habitats.</p>	<p>Plants</p> <p>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 and how they vary from plant to plant. Know the way in which water is transported within plants.</p>	<p>Living things and their habitats</p> <p>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</p>	<p>Properties of materials</p> <p>compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets</p>	<p>Animals including humans</p> <p>Identify and name the main parts of the human circulatory system, describe the functions of the heart, blood vessels and blood. Recognise the impact of diet, exercise, drugs and lifestyle has on the body. Describe the ways in which nutrients and water are transported within animals and humans.</p>

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Summer 1 term

EYFS	Year 1	Year 1/2	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Seasonal changes</p> <p>Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies.</p>	<p>Seasonal changes</p> <p>Living things and their habitats</p> <p>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p>	<p>Plants</p> <p>Observe and describe how seeds and bulbs grow into mature plants find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p>	<p>Forces and magnets</p> <p>Compare how things move on different surfaces and notice that some forces need contact between two objects. Observe how magnets attract or repel each other. 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..</p>	<p>Animals including humans</p> <p>Describe the simple functions of the basic parts of the digestive system in humans Identify the different types of teeth in humans and their simple functions Construct and interpret a variety of food chains, identifying producers, predators and prey.</p>	<p>Changes in materials</p> <p>use knowledge of solids, liquids and gases to decide how mixtures might be separated</p>	<p>Living things and their habitats</p> <p>Describe how living things are classified into broad groups according to common characteristics and based on similarities and differences, including microorganisms, plants and animals. Give reasons for classifying plants and animals based on specific characteristics.</p>

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Summer 2 term

EYFS	Year 1	Year 1/2	Year 2	Year 3	Year 4	Year 5	Year 6
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	<p>Plants</p> <p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants.</p>	<p>Plants</p> <p>Identify and describe the basic structure of a variety of common flowering plants. Observe and describe how seeds and bulbs grow into mature plants find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p>	<p>Living things and their habitats</p> <p>Explore and compare the differences between things that are living, dead, and things that have never been alive describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p>	<p>Animals including humans</p> <p>Learn about the importance of nutrition and introduce the main body parts associated with the skeleton and muscles, finding out how different parts of the body have special functions.</p>	<p>Rising stars: The big build</p>	<p>Animals including humans</p> <p>Describe the changes as humans develop to old age.</p>	<p>Investigative topic</p> <p>Using all working scientific knowledge to create their own science investigation.</p>
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