



A Year Group View of Subject Progression and Coverage in Primary Science



Subject	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Plants	<ul style="list-style-type: none"> • identify and name a variety of common plants, including garden plants and trees, and those classified as deciduous and evergreen • identify and describe the basic structure of a variety of common flowering plants, including roots, stem/trunk, leaves and flowers. 	<ul style="list-style-type: none"> • observe and describe how seeds and bulbs grown into mature plants • find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. 	<ul style="list-style-type: none"> • identify and describe the functions of different parts of flowering plants: roots, stem, 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 in plants • explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. 			

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<p>Animals including Humans</p>	<ul style="list-style-type: none"> • identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates • identify and name a variety of common animals that are carnivores, herbivores and omnivores • describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles, mammals and invertebrates, and including pets) • identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. 	<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, including humans, for survival (water, food and air) • describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. 	<ul style="list-style-type: none"> • identify that animals including humans, need the right types and amount of nutrition, and that they cannot make their own food, but they can get nutrition from what they eat • describe the ways in which nutrients and water are transported within animals, including humans • identify that humans and some animals have skeletons and muscles for support, protection and movement. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Describe the changes as humans develop from birth to old age. 	<ul style="list-style-type: none"> • identify and name the main parts of the human circulatory system and explain the functions of the heart, blood vessels and blood • recognise the impact of diet, exercise, drugs and lifestyle on the way human bodies function • describe the ways in which nutrients and water are transported within animals, including humans.
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Materials

- distinguish between an object and the material from which it is made
- identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock
- describe the simple physical properties of a variety of everyday materials
- compare and group together a variety of everyday materials on the basis of their simple physical properties
- find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

- identify and compare the uses of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock and paper/cardboard.

- compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets
- understand how some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- demonstrate that

					<p>dissolving, mixing and changes of state are reversible changes</p> <ul style="list-style-type: none"> • explain that some changes result in the formation of new materials and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. 	
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Seasonal Changes	<ul style="list-style-type: none"> • observe the apparent movement of the sun during the day 					

	<ul style="list-style-type: none"> • observe changes across the four seasons • observe and describe weather associated with the seasons and how day length varies. 					
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Light	<ul style="list-style-type: none"> • observe and name a variety of sources of light, including electrical lights, flames and the sun • associate shadows with a light source being blocked by 		<ul style="list-style-type: none"> • notice that light is reflected from surfaces • associate shadows with a light source being blocked by something; find patterns that determine the size of shadows. 			<ul style="list-style-type: none"> • understand 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

	something.					<p>give out or reflect light into the eye</p> <ul style="list-style-type: none"> • use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them, and to predict the size of shadows when the position of the light source changes.
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Habitats		<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 to which they are suited and describe how different habitats provide for the basic needs of 				

		<p>different kinds of animals and plants, and how they depend on each other</p> <ul style="list-style-type: none"> • 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, and identify and name different sources of food. 				
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Sound		<ul style="list-style-type: none"> • observe and name a variety of sources of sound, noticing that we hear with our ears • recognise that sounds get fainter as the distance from the sound source increases. 		<ul style="list-style-type: none"> • identify how sounds are made, associating some of them with something vibrating • recognise that sounds get fainter as the distance from the sound source increases • find patterns between the pitch of a sound and features of the object that produced it 		

				<ul style="list-style-type: none"> • find patterns between the volume of a sound and the strength of the vibrations that produced it. 		
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Rocks			<ul style="list-style-type: none"> • compare and group together different kinds of rocks on the basis of their simple physical properties • relate the simple physical properties of some rocks to their formation (igneous or sedimentary) • describe in simple terms how fossils are formed when things that have lived are trapped within the sedimentary rock • recognise that soils 			

			are made from rocks and organic matter.			
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Forces and Magnets			<ul style="list-style-type: none"> • notice that some forces need contact between two objects and some forces 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. 			

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All Living Things				<ul style="list-style-type: none"> • identify and name a variety of living things (plants and animals) in the local and wider environment, using classification keys to assign them into groups • give reasons for classifying plants and animals based on specific characteristics • recognise that environments are constantly changing and that this can sometimes pose dangers to specific habitats. 	<ul style="list-style-type: none"> • explain 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. 	<ul style="list-style-type: none"> • explain the classification of living things into broad groups according to common observable characteristics and based on similarities and differences, including plants, animals and micro-organisms.

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States of matter				<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 or cooled, and measure the temperature at which this happens in degrees Celsius, building on their teaching in mathematics • identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. 		

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Forces					<ul style="list-style-type: none"> • explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object • identify the effect of forces, such as air resistance, water resistance and friction, that act between moving surfaces • understand that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs. 	
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Electricity						<ul style="list-style-type: none"> • identify and name the basic parts of a simple electrical circuit, including cells, wires, bulbs, switches and buzzers • 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, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
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Earth and Space					<ul style="list-style-type: none"> • describe the movements of the Earth relative to the Sun in the solar 	

					<p>system</p> <ul style="list-style-type: none"> • describe the movement of the Moon relative to the Earth • describe the Sun, Earth and Moon as approximately spherical bodies • use the idea of the Earth's rotation to explain day and night. 	
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Evolution and Inheritance						<ul style="list-style-type: none"> • recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago

						<ul style="list-style-type: none">• recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents• identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.
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