

Year 1 - Plants

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National Curriculum Objectives		Sticky Knowledge		Vocabulary
<ul style="list-style-type: none"> 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. Identify and name the roots, trunk, branches and leaves of trees. 		<ul style="list-style-type: none"> Plants grow from seeds/bulbs Plants need light and water to grow and survive Plants are important <p>We can eat lots of plants</p>		Leaves, trunk, branch, root, seed, bulb, flower, stem, wild, garden, deciduous, evergreen
				Key Scientists
				Linked Texts
				Beatrix Potter (Author & Botanist)
				<i>Tree: Seasons Come, Seasons Go</i> (Patricia Hegarty and Britta Teckentrup)
				<i>A Little Guide to Wild Flowers</i> (Charlotte Voake)
				<i>The Things That I LOVE about TREES</i> (Chris Butterworth)
				<i>Harry's Hazelnut</i> (Ruth Parsons)
Prior Learning		Common misconceptions		Future Learning
In EYFS Children should: <ul style="list-style-type: none"> Make observations of plants Know some names of plants, trees and flowers May be able to name and describe different plants, trees and flowers Show some care for their world around them 		Some children may think: <ul style="list-style-type: none"> Plants are flowering plants grown in pots with coloured petals and leaves and a stem Trees are not plants All leaves are green All stems are green A trunk is not a stem Blossom is not a flower 		In Year 2 Children will: <ul style="list-style-type: none"> Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and warmth to grow and stay healthy.
Teaching Ideas				
Comparative tests	Identify & Classify	Observation over time	Pattern Seeking	Research
Which type of compost grows the tallest sunflower?	How can we sort the leaves that we collected on our walk?	How does a daffodil bulb change over the year?	Do trees with bigger leaves lose their leaves first in autumn?	What are the most common British plants and where can we find them?
Which tree has the biggest leaves?	Observe and sort leaves. TAPS	How does my sunflower change each week? How do trees/plants change over the year? TAPS	Is there a pattern in where we find moss growing in the school grounds?	How did Beatrix Potter help our understanding of mushrooms and toadstools?

Year 1 - Animals, including humans

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National Curriculum Objectives		Sticky Knowledge		Vocabulary
<ul style="list-style-type: none"> Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name a variety of common animals that are carnivores, herbivores and omnivores 		<ul style="list-style-type: none"> There are many different animals with different characteristics. Animals have senses to help individuals survive. When animals sense things they are able to respond. Animals need food to survive. Animals need a variety of food to help them grow, repair their bodies, be active and stay healthy. 		Amphibians, birds, fish, mammals, reptiles, carnivores, herbivore, omnivore, sight, hearing, touch, taste, smell, head, neck, ear, mouth, shoulder, hand, fingers, leg, foot, thumb, eye, nose, knee, toes, teeth, elbow
				Key Scientists
				Chris Packham (Animal Conservationist)
				Linked Texts
				<i>One Year with Kipper</i> (Mick Inkpen) Snail Trail (Ruth Brown) Superworm (Julia Donaldson & Axel Scheffler)
Prior Learning		Common misconceptions		Future Learning
In Early Years children should: <ul style="list-style-type: none"> be able to identify different parts of their body. Have some understanding of healthy food and the need for variety in their diets. Be able to show care and concern for living things. Know the effects exercise has on their bodies. Have some understanding of growth and change. Can talk about things they have observed including animals 		Some children may think: <ul style="list-style-type: none"> Only four-legged mammals, such as pets, are animals. Humans are not animals Insects are not animals All 'bugs' or 'creepy crawlies', such as spiders, are part of the insect group Amphibians and reptiles are the same. 		In Year 2 children will: <ul style="list-style-type: none"> Know that animals, including humans, have offspring which grow into adults Know the basic stages in a life cycle for animals, including humans. Find out 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.
Teaching Ideas				
Comparative tests	Identify & Classify	Observation over time	Pattern Seeking	Research
Is our sense of smell better when we can't see?	Can you classify animals by animal groups/what they eat? TAPS Can you label body parts/senses? TAPS	How does my height change over the year?	Do you get better at smelling as you get older?	Do all animals have the same senses as humans?

Year 1 - ENERGY (Seasonal changes)

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National Curriculum Objectives		Sticky Knowledge		Vocabulary
<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. 		<ul style="list-style-type: none"> Weather can change There are lots of different types of weather: Rain, Sun, Cloud, Wind, Snow, etc Days are longer and hotter in the summer Days are shorter and colder in the winter There are four seasons: Spring, Summer, Autumn, Winter 		Seasons, spring, summer, autumn, winter, windy, sunny, overcast, snow, rain, temperature
				Key Scientists
				Dr Steve Lyons (Extreme Weather) Holly Green (Meteorologist)
				Linked Texts
				Tree: Seasons Come, Seasons Go (Patricia Hegarty and Britta Teckentrup) One Year with Kipper (Mick Inkpen) After the Storm (Nick Butterworth)
Prior Learning		Common misconception		Future Learning
In Early Years children should: <ul style="list-style-type: none"> Developing an understanding of change. Observe and explain why certain things may occur (e.g leaves falling off trees, weather changes). Look closely at similarities, differences, patterns and change. Comments and questions about the place they live or the natural world. 		Some children may think: <ul style="list-style-type: none"> It always snows in winter It is always sunny in the summer There are only flowers in spring and summer It rains most in the winter. 		In Year 3 children will: <ul style="list-style-type: none"> 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 a solid object. Find patterns in the way that the sizes of shadows change.
Teaching Ideas				
Comparative tests	Identify & Classify	Observation over time	Pattern Seeking	Research
In which season does it rain the most?	How could you organise all the objects in the solar system into groups?	How does the colour of a UV bead change over the day? Observe the seasons over the year. TAPS	Does the wind always blow the same way?	Are there plants that are in flower in every season? What are they?

Year 1 - Materials

National Curriculum Objectives		Sticky Knowledge	Vocabulary		
<ul style="list-style-type: none"> Distinguish between an object and the material from which it is made. Identify and name a variety of everyday materials, including wood, metal, plastic, glass, 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 properties 		<ul style="list-style-type: none"> There are many different materials that have different describable and measurable properties. Materials that have similar properties are grouped into metals, rocks, fabrics, wood, plastic and ceramics (including glass). The properties of a material determine whether they are suitable for a purpose. 	Hard, soft, stretchy, stiff, shiny, dull, rough, smooth, bendy/not bendy, waterproof/not waterproof, absorbent, opaque,	Key Scientists	Linked Texts
			William Addis (Toothbrush Inventor) Charles Mackintosh (Waterproof coat) John MacAdam (roads)	<i>The Great Paper Caper</i> (Oliver Jeffers) <i>Who Sank the Boat</i> (Pamela Allen) <i>The Story of Cinderella</i> (Walt Disney)	
Prior Learning		Common misconceptions	Future Learning		
In Early Years children should: <ul style="list-style-type: none"> be able to ask questions about the place they live. Talk about why things happen and how things work. Discuss the things they have observed such as natural and found objects. Manipulates materials to achieve a planned effect. 		Some children may think: <ul style="list-style-type: none"> Only fabrics are materials Only building materials are materials Only writing materials are materials The word 'rock' describes an object rather than a material 'Solid' is another word for hard. 	In Year 2 children will: <ul style="list-style-type: none"> Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out how shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. 		
Teaching Ideas					
Comparative tests	Identify & Classify	Observation over time	Pattern Seeking	Research	
Which materials are the float? TAPS Can you compare materials on their transparency? TAPS Compare reflective materials TAPS	We need to choose a material to make an umbrella. Which materials are waterproof?	What happens to materials over time if we bury them in the ground? What happens to shaving foam over time?	Is there a pattern in the types of materials that are used to make objects in a school?	How are bricks made? Which materials can be recycled?	