

KS1: MEDIUM TERM PLANNER

Plants Y1

Pupils should be taught to:

- 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, including trees

The principal focus of science teaching in key stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Most of the learning about science should be done using first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as books, photographs and videos.



'Working and thinking scientifically' is described separately at the beginning of the programme of study but must always be taught through and clearly related to substantive science content in the programme of study. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content.

Pupils should read, spell, and pronounce scientific vocabulary correctly.

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes, and skills through the teaching of the programme of study content:

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions


Prior Learning:


- Plant seeds and care for growing plants. (Nursery – Plants)
- Understand the key features of the life cycle of a plant and an animal. (Nursery – Plants)
- Begin to understand the need to respect and care for the natural environment and all living things. (Nursery – Plants)
- Explore the natural world around them. (Reception – Living things and their habitats)


Future learning:



- Observe and describe how seeds and bulbs grow into mature plants. (Y2 - Plants)
- Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Y2 - Plants)
- Identify and name a variety of plants and animals in their habitats, including microhabitats. (Y2 - Living things and their habitats)
- Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. (Y3 - Plants)

<ul style="list-style-type: none"> • Recognise some environments that are different to the one in which they live. (Reception – Living things and their habitats) 		<ul style="list-style-type: none"> • Investigate the way in which water is transported within plants. (Y3 - Plants) 	
Key Questions (show how content and concepts link) Differentiated Learning Objectives	Teaching and learning activities (linked directly to objectives)	Resources (to help pupils reach the learning objectives)	Written and non -written outcomes (assessment including homework's)
<p>1) Who was Beatrix Potter?</p> <p>SCIENCE CAPITAL: <i>How does this lesson connect with children in my class? What do you see outside your window looking at your garden? What do you notice it has inside it?</i></p> <p>Science Working scientifically Skills:</p> <p>?? ? ? ? ? ? ? ? ?</p> <p>Science Enquiry Type Research</p> <p><i>Growing locally, there will be vast array plants which all have specific names. These can be identified by looking at the key characteristics of the plant. Plants have common parts, but they vary between the different types of plants. Some trees keep their leaves all year while other trees drop their leaves during</i></p>	<p>Science reasoning task: explorify: Who is? Show a picture of Beatrix potter and ask who do you think she is? What do you think she did? Do you think she is still alive? What clue does the picture give about what she was interested in?</p> <p>Activity 1: PowerPoint go through and discuss facts about Beatrix Potter.</p> <p>Activity 2: Show how to research google/ internet search engines to find facts about different planets. Come up with questions that which to research and model writing notes to own questions.</p> <p>Activity 3: Create a biography (templates given)</p> <p>Misconception:</p> <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 • A trunk is not a stem • Blossom is not a flower 	<p>Activity 1: Beatrix Potter - Bing video PowerPoint</p> <p>Activity 2: Pupils use internet – websites to find out facts about Beatrix</p> <p>Activity 3- Template of biography to be given.</p>	<p>Assessment: Researching and creating fact files about Beatrix Potter.</p> <p>Homework: sketching different plants observed in my garden/ local area.</p>

<p>autumn and grow them again during spring.</p> <p>2) LO: What do plants need to stay alive?</p> <p>SCIENCE CAPITAL: <i>How does this lesson connect with children in my class? What have you or your adults at home grown? What happened to it? Did it grow well? What did it need?</i></p> <p>Science Working scientifically Skills:</p> <p>?? </p> <p>Science Enquiry Type</p> <p>Observation/ Comparative</p> <p><i>Growing locally, there will be vast array plants which all have specific names. These can be identified by looking at the key characteristics of the plant. Plants have common parts, but they vary between the different types of plants. Some trees keep their leaves all year while other trees drop their leaves during autumn and grow them again during spring.</i></p>	<p>Science reasoning task: explorify: Craggy surface- zoom in and zoom out- What is the same? What is different?</p> <p>Activity 1: Think/ pair share – what do you think plants need and why? Share and put on display for future reference.</p> <p>Activity 2: Show concept cartoon- planting in different conditions- whose plant would grow? Why do you think that?</p> <p>Activity 3: Each table to set up planting- with different conditions. Big book to log the beginning and then each week to make observations of the plant.</p> <p>Misconception:</p> <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 A trunk is not a stem <p>Blossom is not a flower</p>	<p>Activity 1: PowerPoint</p> <p>Activity 2: concept cartoon- sentence stems.</p> <p>Activity 3: resources for planting and seeds.</p>	<p>Assessment: Are pupils able to identify what is needed for plant to grow well?</p>
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<p>3) LO: What is the difference between wild and garden plants?</p> <p>SCIENCE CAPITAL: <i>How does this lesson connect with children in my class? What plants do you notice in your garden? Can you name them?</i></p> <p>Science Working scientifically Skills:</p> <p>?? </p> <p>Science Enquiry Type Research</p> <p><i>Growing locally, there will be vast array plants which all have specific names. These can be identified by looking at the key characteristics of the plant. Plants have common parts, but they vary between the different types of plants. Some trees keep their leaves all year while other trees drop their leaves during autumn and grow them again during spring.</i></p>	<p>Science reasoning task: explorify: Craggy surface - Explorify</p> <p>Activity 1: Go on a walk in the local area/ school grounds and note which plants they see around them.</p> <p>Activity 2: classify wild and garden plants.</p> <p>Misconception:</p> <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 A trunk is not a stem Blossom is not a flower 	<p>Activity 1: PowerPoint/ local area risk assessment.</p> <p>Activity 2: Venn diagram and pictures of different plants to sort.</p>	<p>Assessment: Are pupils able to explain the difference between wild and garden plants?</p>
<p>4) LO: How do we classify these seeds?</p>	<p>Science reasoning task: explorify: Spotted a flower you really like? - Explorify</p>	<p>Activity 1: range of variety of seeds, magnifying glasses.</p> <p>Activity 2: PowerPoint</p>	<p>Assessment: Are ch able to identify similarities and differences between seeds- some ch may be able to identify seeds and the plant it grows into.</p>

<p>SCIENCE CAPITAL: <i>How does this lesson connect with children in my class? What seeds do you see?</i></p> <p>Science Working scientifically Skills:</p>  <p>Science Enquiry Type Research</p> <p>Growing locally, there will be vast array plants which all have specific names. These can be identified by looking at the key characteristics of the plant. Plants have common parts, but they vary between the different types of plants. Some trees keep their leaves all year while other trees drop their leaves during autumn and grow them again during spring.</p>	<p>Activity 1: Pupils to have a range of different seeds and as pairs/ tables to identify what is the same and what is different. How can you classify different seeds?</p> <p>Activity 2: PowerPoint go through different seeds-</p> <p>Activity 3: classify different seed types- some choosing their own classification labels.</p> <p>Misconception:</p> <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 A trunk is not a stem Blossom is not a flower 	<p>Activity 3: Venn diagrams</p>	
<p>5) LO: What are the different parts of the flowering plant?</p> <p>SCIENCE CAPITAL: <i>How does this lesson connect with children in my class? Do all flowers have the same parts? What do you know about garden plants?</i></p> <p>Science Working scientifically Skills:</p>	<p>Science reasoning task: explorify: Spotted a flower you really like? - Explorify</p> <p>Activity 1: PowerPoint go through different parts of plant and explain each parts purpose.</p> <p>Activity 2: Dissect plant and able to match parts to the name.</p> <p>Activity 3: Complete label flower and MA HA to describe the purpose of each part.</p>	<p>Activity 1: PowerPoint go Science KS1 / KS2: Parts of a plant - BBC Teach</p> <p>Activity 2: daffodils/ plant to dissect/ tweezers/ mat/ label/ pictures to match.</p> <p>Activity 3: closed differentiated worksheet.</p>	<p>Assessment: Are ch able to name the different parts and describe the basic parts.</p> <p>Homework: collect different flowering plant and see if you can label the different parts.</p>

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<p>6) LO: What is the difference between deciduous and evergreen trees?</p> <p>SCIENCE CAPITAL: <i>How does this lesson connect with children in my class? What different trees do you notice in your garden? Street? Park etc?</i></p> <p>Science Working scientifically Skills:</p>  <p>Science Enquiry Type</p> <p>Growing locally, there will be vast array plants which</p>	<p>Activity 1: PowerPoint go through and discuss the different types of trees and the term deciduous and ever green trees.</p> <p>Activity 2: Go on a walk-in school playground and identify the different trees around in our local area.</p> <p>Activity 3: label the different parts of the trees and describe the difference between deciduous and evergreen trees.</p> <p>Misconception:</p> <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 A trunk is not a stem 	<p>Activity 1: PowerPoint go.</p> <p>Activity 2: treasure hunt sheet/ tally sheet.</p> <p>Activity 3: tree diagram and labels. Classify deciduous and ever green trees.</p>	<p>Assessment: Able to explain the difference between deciduous and evergreen trees.</p>

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These can be identified by looking at the key characteristics of the plant. Plants have common parts, but they vary between the different types of plants. Some trees keep their leaves all year while other trees drop their leaves during autumn and grow them again during spring.

- Blossom is not a flower