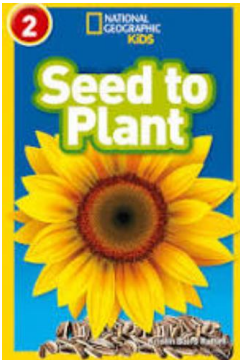
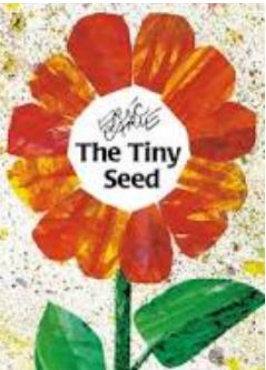
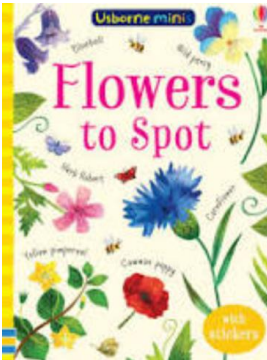
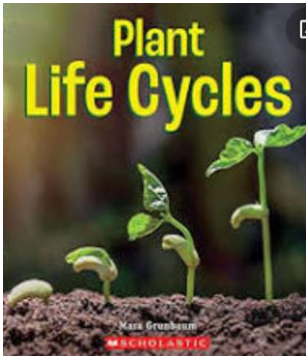
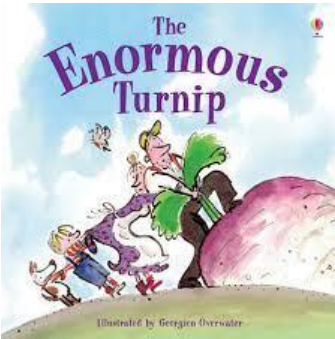


BILSTON CHURCH OF ENGLAND PRIMARY



MEDIUM TERM PLANNING

Subject	Topic/Key Question	Year Group	Term	Time Allocation
Science	Plant detectives	1	Summer 1	12 hours
 <p data-bbox="180 873 396 902">Reading scheme</p>	 <p data-bbox="562 881 798 911">KS1 picture books</p>	 <p data-bbox="949 873 1184 902">KS1 picture books</p>	 <p data-bbox="1354 867 1547 896">Library service</p>	 <p data-bbox="1680 836 1961 865">Guided reading boxes</p>
<p data-bbox="107 984 428 1078">End of Key Stage 1 Outcomes</p>	<p data-bbox="495 984 1969 1308">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.</p>			
<p data-bbox="107 1370 306 1464">End of Unit Outcomes</p>	<p data-bbox="495 1370 1913 1464">I can identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p>			

	I can identify and describe the basic structure of a variety of common flowering plants, including trees.
Vocabulary	commons, wild plants, garden plants, deciduous, evergreen, trunk, branches, leaf, root, bud, leaves, flowers, blossom, petals, stem, fruit, vegetables, bulb, seeds.

Lesson Sequence	Time Allocation	Key Question/WALT	Teaching Activities	Resources
Lesson 1 What garden plants can we find around our school?	2 hour	<p>WALT: Understand plants.</p> <p>Success Criteria</p> <ul style="list-style-type: none"> • I can identify and name some familiar garden plants. • I can make careful observations of garden plants. • I can compare garden plants that I see and say in simple terms how they are similar and different. 	<p><u>Working Scientifically Link.</u></p> <p>Observing closely using simple equipment.</p> <p>Ask: What does a plant look like? Ask children to draw a plant with flowers that they have seen growing. They may look at their drawings in their Our Changing World Diaries. Ask them to label parts of the plant that they can name. As they work, identify drawings to share, such as those showing a particular plant or details such as plant parts or labels. Use a visualiser to share these.</p> <p>Ask: How are the drawings similar? Do they all have leaves? Are they the same shape? Do any have flowers? What sorts of flowers? Do any drawings show roots? Are the plants in a pot or in a garden? How can you tell? Are any drawings labelled? Which parts are labelled?</p> <p>Show some potted flowering plants. Prompt observations with questions.</p> <p>Ask: Which plants have a stem? Which have side branches? Which have many leaves coming from the</p>	<p>Snap Science:</p> <p>Resource sheet 1</p> <p>Resource sheet 2</p> <p>Resource sheet 3</p> <p>Slideshow 1</p> <p>Garden plant catalogues, labels from plants, potted plants, such as geranium, pansy, cosmos, lavender, fuchsia, busy</p>

			<p>base? What shape are these? What size and colour? Are any flowering? What differences are there between the flowers?</p> <p>Introduce the names of these plants. Label photograph of the plants.</p> <p>Ask: Can you think of any fun ways to remember the names? The Garden plant identification sheet (Slideshow 1) includes common examples that children might encounter.</p> <p>Explain to children that they are going to get to know the flowering plants around school that people planted – not wild plants. They will sketch the plants where they find them. Provide magnifiers and digital cameras.</p> <p>Take children to a planted area, and point to and name different flowering plants. Remind children of the plant names throughout the lesson and suggest ways to remember them.</p> <p>Ask: Did we see pictures of any of these?</p> <p>The challenges are differentiated by the level of detail required in observation. The writing frames for Challenges 1 and 2 (Getting to know our garden plants: Challenge 1, Resource sheet 1, and Getting to know our garden plants: Challenge 2, Resource sheet 2) illustrate the process and provide guidance for supporting children, rather than for children to use independently. Children can use the laminated slides to help with identification.</p>	<p>Lizzie; magnifiers, digital cameras, visualiser (optional), Our Changing World diary (optional)</p>
Lesson 2	2 hour	WALT: Understand plants.	Working Scientifically Link.	Snap Science:

<p>What wild plants can we find around our school?</p>		<p><u>Success Criteria</u></p> <ul style="list-style-type: none"> • I can identify and name some familiar wild plants. • I can make careful observations of wild plants. • I can compare wild plants that I see and say in simple terms how they are similar and different. 	<p>Observing closely using simple equipment.</p> <p>Ask: What is a ‘wild plant’?</p> <p>Show children What is a wild plant? (Slideshow 1), which shows common wild flower plants that they might see. Focus on those they will find locally.</p> <p>Ask: Which has the most unusual name? Why do you think it has that name?</p> <p>Ask children to think about why they were given these names (for example, bluebell, cornflower, bindweed). Show the slide of shepherd’s purse which is named after its heart-shaped seeds, like tiny purses – not its flowers.</p> <p>Ask: How can we remember the names of these plants? Finish with slides from Slideshow 1 featuring a gardener, Petunia Smith and her cousin Robin.</p> <p>Ask: What do you think about what Petunia and Robin said?</p> <p>At this stage, it is sufficient for children to know that many common wild plants grow easily in places where gardeners do not want them and to call them ‘weeds’. If children mention seeds, explain that all garden soil contains many seeds. Some begin to grow without help from a gardener.</p> <p>Explain to children that they are going to look at places around school to get to know the wild plants that grow there.</p> <p>Ask children outside and point out examples of common wild plants. Name them one by one, especially the most</p>	<p>Resource sheet 1</p> <p>Resource sheet 2</p> <p>Resource sheet 3</p> <p>Slideshow 1</p> <p>Wildflower seeds or plug plants, containers, ‘collector trays’ (small plastic food trays are useful), magnifiers, digital cameras, Our Changing World diary (optional), books and other plant identification resources</p>
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			<p>common varieties they saw on the slides. Throughout the lesson remind children of the plant names, using their ideas for remembering them.</p> <p>Ask children to look for more wild plants to record their location. The challenges are differentiated by the level of detail and comparison required. Ensure that children are supported by adults as appropriate. The writing frames on the Resource sheets are intended as guidance to support children's observations, not necessarily for them to complete independently.</p> <p>Give each pair a 'collector tray' and the relevant laminated slides from What is a wild plant? (Slideshow 1). Check beforehand for dangerous or protected plants. Children should not pick flowers unless told to do so. Show how to pick a specimen (a small sample, not the whole plant).</p>	
<p>Lesson 3</p> <p>What is the same and different about the flowers around us?</p>	2 hour	<p>WALT: Investigate living things.</p> <p>Success Criteria</p> <ul style="list-style-type: none"> • I can recognise and identify flowering garden and wild plants, sometimes with help. • I can describe similarities and differences between flowers. 	<p><u>Working Scientifically Link.</u></p> <p>Identifying and classifying.</p> <p>Ask: How are flowers different?</p> <p>Share children's ideas and then show Are all flowers the same? (Slideshow 1).</p> <p>Ask: What do you think about Jamie's ideas? Why do you agree/disagree?</p> <p>Provide sufficient potted flowering plants (from Lesson 1 of this module) so children can see several plants. Encourage them to look closely at the flowers on one or more plants and to talk to their partners about what they notice. Prompt their thinking.</p>	<p>Snap Science:</p> <p>Slideshow 1</p> <p>Slideshow 2</p> <p>Flowering pots, plants, such as tulip, lily, geranium, pansy, cosmos, lavender, fuchsia, busy Lizzie; plant catalogues,</p>

		<ul style="list-style-type: none"> • I can group flowers in different ways, sometimes choosing my own groups. 	<p>Ask: Does your plant have lots of flowers? Are they big or small? What shape are they? Do they have petals? How many? Are all petals as Jamie thought, or in different colours? Is each flower one colour or more? Are there patterns on the petals? Do the flowers have a perfume?</p> <p>Talk about the different sorts of flowers shapes, sizes, some with perfume and different numbers of petals. Explain to children that they are going to work together to find as many different types of flowers as they can around school and then make collages to show this variety. Children need to collect a variety of flowers using collector trays (see Lesson 2). These can be supplemented with cut flowers. Children should not pick flowers without permission. They can add flower images from plant catalogues or their own sketches.</p> <p>Show Grouping flowers and making a collage (Slideshow 2) and explain it. Provide an A3 sheet of paper or card for each group. Children arrange real flower heads, cut out photograph, images from plant catalogues and sketches, and photograph each grouping to share later. The challenges are differentiated by the complexity of the sorting criteria.</p>	<p>cut flowers magnifiers, digital cameras, 'collector trays' (for example, small plastic food trays), A3 paper or card, paint chart strips or colour samples (optional)</p>
<p>Lesson 4</p> <p>What is happening underground beneath our plants?</p>	<p>2 hour</p>	<p>WALT: Understand plants.</p> <p>Success Criteria</p> <ul style="list-style-type: none"> • I can identify the roots of different kinds of plants. 	<p><u>Working Scientifically Link.</u></p> <p>Using observations and ideas to suggest answers to questions.</p> <p>Display Plant detectives (Slideshow 1). Moley Mole and Rupert Rabbit are true plant detectives. They spend a lot of their time burrowing under the ground and see what is</p>	<p>Snap Science:</p> <p>Resource sheet 1</p> <p>Resource sheet 2</p>

		<ul style="list-style-type: none"> • I can make observations of roots. • I can compare and contrast the roots of a variety of familiar plants, describing how they are similar to and different from one another 	<p>really happening underneath plants for themselves. Delilah Duck, on the other hand, does not believe that plants do not have legs and feet. “After all”, she says, “when I’m swimming on the water or sitting on my nest you can’t see my legs and feet, but I know they are there!”</p> <p>What do children think?</p> <p>Ask: What do you think Rupert Rabbit and Moley Mole see when they are underground? What is the part of a plant called that is underground, out of sight? What do you think it is for?</p> <p>Explain to children that today they are going to find some evidence to prove to Delilah Duck that plants do not have legs and feet like ducks and other animals.</p> <p>Children carry out a simple enquiry to compare root systems attached to a variety of different plants. They observe carefully, using magnifiers and microscopes, and decide how, in simple terms, they are similar and different.</p> <p>All three Challenges require children to access and observe a variety of plants and their root systems, using magnification equipment whenever possible.</p> <p>Differentiation is achieved through the use of questioning to prompt more detailed observation and comparison.</p> <p>The writing frames are intended as guidance for teachers to help support children’s observations, not necessarily for children to complete independently. A ‘talking postcard’ or similar talk tool might be provided for children to use instead of attempting to write down their ideas.</p>	<p>Resource sheet 3</p> <p>Slideshow 1</p> <p>A variety of plants that have been dug up from planted borders, vegetable gardens or waste areas, such as dandelion, daisy, clumps of grass, carrots; bedding plants, some potted plants that might be lifted temporarily from their pots, magnifiers, microscope, digital</p>
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				cameras, glue or sticky tape
Lesson 5 What makes a tree a tree?	2 hour	<p>WALT: work scientifically.</p> <p>Success Criteria</p> <ul style="list-style-type: none"> • I can identify a variety of trees in my local environment. • I can observe and describe trees, identifying similarities and differences between them. • I can compare the heights of different types of trees and the diameter of their trunks 	<p><u>Working Scientifically Link.</u></p> <p>Gathering and recording data to help in answering questions.</p> <p>Say to children: Trees can be giants! But they are really just a type of plant, with a massive stem that we call a ‘trunk’.</p> <p>Ask: How tall is a tree? Show children the photographs of different trees in the local environment (see Preparation).</p> <p>Ask: Which tree do you think is the tallest and which the shortest? How can you be sure? Provide printed copies of the slides to arrange in height order.</p> <p>Ask: We decided which tree we thought was the tallest and which the shortest, but how will the others fit in? Is this one shorter or taller than that one?</p> <p>Help children to create sentences to compare the trees, such as “The rowan tree is smaller than the oak tree. The oak is the biggest tree”. Use Key vocabulary flashcards (Resource sheet 1) to help build sentences. Blank flash cards are provided for adding trees specific to your area.</p> <p>Ask: What types of trees can you find in our local area? What do all trees have in common? Do all those we have seen have trunks and branches? Do they all have leaves?</p> <p>Return to the photographs and repeat the names of parts of a tree, particularly the trunk.</p>	<p>Snap Science:</p> <p>Resource sheet 1</p> <p>Slideshow 1</p> <p>Strips of paper to wrap around trunks of trees, wax crayons and paper, digital cameras, sketchpads, tape measures and metre sticks</p>

			<p>Ask: Are all the trunks of trees always the same size or are some bigger than others?</p> <p>Explain to them that they are going to get to know a tree by taking bark rubbings and photographs, collecting leaves and twigs, and so on. They wrap strips of paper around their tree to measure the size of the trunk. Back in class they make a display or big book page about 'Our trees'. Show Getting to know your tree (Slideshow 1) and go through it.</p> <p>The challenges are differentiated by the levels of observational and comparison skills required for their completion. The challenges are presented on the Challenge slides to be displayed on the board, or printed and handed out to the children.</p>	
<p>Lesson 6 (Enrichment Lesson)</p> <p>What different types of plants, leaves and flowers can be found at a garden centre?</p>	<p>2 hour</p> <p>Involves school trip or virtual tour of garden centre in school.</p>	<p>WALT: Investigate living things.</p> <p>Success Criteria</p> <ul style="list-style-type: none"> • I can make observations about plants at the garden centre and in the classroom. • I can use scientific vocabulary to describe the different parts of the plants. 	<p><u>Working Scientifically Link.</u></p> <p>Observing closely using simple equipment.</p> <p>Take children to a garden centre. Give some children digital cameras to take photographs, some clipboards and pencils to produce quick sketches, and others sound recorders to record descriptions of what they see.</p> <p>Explain to children that their task is to collect as much information as they can about the different plants, leaves and flowers at the garden centre. Remind them of what they know already about the different shapes, sizes and colours of plants, flowers and leaves, and show them the images on Exotic plants (Slideshow 1) to introduce tropical plants that they might see. Back in class, they</p>	<p>Snap Science:</p> <p>Slideshow 1</p> <p>Slideshow 2</p> <p>A lush display of plants in the classroom, photographs of the plants in their natural habitat, digital cameras, sound recorders,</p>

		<ul style="list-style-type: none"> • I can draw images of plants, leaves and flowers that look as real as possible. 	<p>communicate the information they have collected in a series of garden centre mural panels for the classroom</p> <p>In the classroom children use the evidence they have collected in the form of photograph and drawings, together with plants on display in the classroom. They make close observations, design, draw and paint leaves and flowers, adding surface details, textures and patterns. Some leaves and flowers should be modelled in three dimensions, for example, by adding flower centres made of cones or rolled balls of paper, or curling petals and leaves to give them structure. Children might use crepe paper, which curls and stretches well.</p> <p>The outcomes of their work should be presented collaboratively on mural panels, which can be made from shallow cardboard cartons, or trays lined with thick paper or thin card and painted many shades of green as a background for the flowers, stems, leaves and flowers. Display Make jungle-like collages (Slideshow 2) and go through it.</p>	<p>clipboards and pencils, secondary sources of information; for the mural panels – shallow cardboard trays such as supermarket salad trays, thick paper or card to line bases of trays, paints, coloured pencils and pens, coloured papers, crepe paper, pipe cleaners, PVA glue, scissors</p>
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