

TERM 5 OVERVIEW YEAR 1 and 2 - SCIENCE

Term 5 Book – Lila and the Secret of Rain

Topic – Plants		Guide Time = 7 weeks
Assessment	Twinkl assessment (modified) VIP quizzes throughout the half term	VIPs: <ul style="list-style-type: none"> • Deciduous trees shed their leaves. • Evergreen trees remain green throughout the seasons. • Plants need water, light and a suitable temperature to grow. • Seeds need water to grow as they have food stored inside them. • Fruit and vegetables grow on trees, bushes, vines and under ground. • Leaves make food for the plant using sunlight. • Petals attract insects to the plant to collect pollen. • Pollen helps the plant to reproduce. • Roots absorb minerals and water from soil. • Roots anchor the plant into the soil to keep it sturdy. • The stem transports water around the plant and supports the plant to stay upright. • Seeds are the part of a plant which can grow into new plants. • Tree trunks anchor and support the tree as well as transport nutrients and water. Fat Questions: <ul style="list-style-type: none"> • How would the world change if we didn't have the sun? • Where did the first seed come from? • What came first the seed or the plant?
Links to prior learning (sequencing) and canon book	This unit builds upon the children's knowledge of living things and what they need to survive. This topic links to the canon text looking at what plants need to grow and who/what uses they have. Prior learning about healthy eating will also support children in this topic.	
Links to other learning (cross fertilisation)	<p>There are links to English through the canon text, as the focus of the story is around getting plants to grow in a sub-tropical climate.</p> <p><u>The World Beyond us</u> What differences are there between foods grown in England and foods grown in Africa? Why do they have these differences? How can plant growth affect humans' everyday lives?</p> <p><u>Healthy Bodies Healthy Minds</u> What do plants give us to keep us healthy? Are all plants edible to humans or animals?</p> <p><u>The Word Around Us</u> What could we do to ensure everyone in the world has fresh food? Why is it important to respect the environment?</p> <p><u>Culture</u> Do all humans need plants to survive? Do all humans need meat to survive? How does the African environment effect farming culture?</p> <p><u>Modern Britain</u></p>	

	<p>Do plants need soil to survive? What impact does leaving Europe have on our food in England?</p> <p><u>Technology In Action</u> How can technology be used to improve plant growth?</p>	<ul style="list-style-type: none"> • If we didn't have seeds what food could we eat? • Why do plants in the same pot grow different heights? • How do flowers get their colour?
<p>Links to future learning</p>	<p>This topic will be further built upon during the summer 2 term where children will look at seasonal changes during spring and summer and compare these to autumn and winter.</p>	
<p>Character/Wider Development ('50 ,things', cultural capital (skills</p>	<p>This unit of work encourages children to think about the environment and sustainability. They consider how the grow their own food and explore what plants need to survive. Children can make daisy chains, grow their own plants and food as well as look at what affects plant growth.</p>	

OVERVIEW OF TEACHING SEQUENCE

Key Facts/Learning	Learning Focus or Key Question	Learning Outcomes (NC)	/Key Words Vocabulary	Greater Depth/SEND	Misconceptions	Activities and Resources
Lesson 1: To identify and name common plants and trees. To label parts of a plant.	Is a plant more than just a flower?	Identify and name common wild and garden plants including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants/trees	tree plant petal flower roots seed leaves water nutrients light stem pollen	GD: Children to complete their labels and use their knowledge to complete labelling of a tree independently. SEND: To label a common plant using cut and stick techniques where appropriate.	Children may confuse the position of the parts of the plant. Children may not realise that parts of the plant are under the soil or cannot be seen.	Children to discuss prior knowledge of plants. They are to name and describe plants they already know. Children to go on a flower/plant hunt around their school. Using plant structure sheets and real plants children are to label the key parts including roots, stem, leaves, petals, fruit, seed, trunk, branches and stem. Y1- To label key parts and colour in a plant using real life plants as a guide. Y2- To draw and label a plant using a real-life plant as a guide.

<p>Lesson 2: To identify the differences between deciduous and evergreen trees.</p>	<p>Are all leaves green all of the time?</p>	<p>Identify and name a variety of deciduous and evergreen trees.</p>	<p>tree plant petal flower roots seed water nutrients light stem pollen trunk leaves branch evergreen season deciduous</p>	<p>SEND: Match leaves from given pictures.</p> <p>GD: Children complete accurate sketching of leaves from trees and complete matching activity giving verbal explanations for their answers.</p>	<p>Children may confuse evergreen leaves that are green at certain times of the year.</p> <p>Children may find it difficult to discuss the shape of the leaf.</p> <p>Children may confuse leaves from plants and trees.</p>	<p>Lesson 2:</p> <p>Show children a selection of leaves from the local area, children to observe the leaves and discuss similarities and differences.</p> <p>Children to sketch leaves into a grid and write about their shape and whether they are deciduous or evergreen using knowledge from power point.</p> <p>Y1- Children to sketch and label their shape including if they are deciduous or evergreen.</p> <p>Y2- Children to sketch and label leaves if they are deciduous or evergreen, before completing match up activity to decide which tree their leaf is from and explain why.</p> <p>Discovery education resources for SEND/Starters</p>
<p>Lesson 3: To observe, compare and contrast vegetables.</p>	<p>What part of the plant are vegetables from?</p>	<p>Identify and name common wild and garden plants including deciduous and evergreen trees.</p> <p>Identify and describe the basic structure of a variety of common</p>	<p>fruit vegetable tree bush vine ground soil water nutrients supermarket transport farming sustainable</p>	<p>GD: Sort, label and write sentences about where different foods are grown. Y2 will also be able to explain a simple process of how food gets to their table.</p> <p>SEND: Sort pictures/vegetables into where they come from.</p>	<p>Children may confuse different parts of plant when seen on a vegetable.</p> <p>Children may think the vegetable is the plant.</p> <p>Children may think that vegetables all come from the shops.</p> <p>Children may confuse where different vegetables grow.</p>	<p>Lesson 3:</p> <p>Children to look at a range of different fruit and vegetables grown in different places. They are to taste each one and decide where they have come from. Allow children to lead discussion around supermarkets and farms before showing them photos of where food comes from e.g. vines, trees, under ground and on bushes.</p> <p>Look at farming video to reinforce this knowledge and complete a practical match up activity using real life foods.</p> <p>Y1- Complete activity in small groups using video facts to support their decision making.</p> <p>Y2- Complete activity in small groups or pairs using comprehension sheet to support fact finding.</p>

		flowering plants/trees				Children to choose their favourite vegetable, labelling the key parts including leaves, seed, roots and then write about where they come from. Y2- To also explain how they think the food gets from the ground to their table (flow chart optional).
Lesson 4: To investigate to find out what a plant needs to grow	Do plants need the same as humans?	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.	investigate predict observe conclude healthy unhealthy light water nutrients food growth conditions diary	GD: Pupils will be able to discuss and write about what plants need to grow based on their observations. They will draw conclusions about their investigation prior to finding out the results. SEND: Draw and label a healthy and unhealthy plant.	Children may think that plants need food. Children may confuse how a plant gets its nutrients. Children may predict that the cress will still grow if it doesn't have what it needs. Children may not recognise cress as a plant.	Lesson 4: Starter: Children to plant a bean at the beginning of the session to sketch and observe in session 5. Children may complete a daily bean diary of its growth throughout the next 3 weeks. Discuss focus around what a plant needs to grow and that they will observe and be responsible for their own plants after today's session. Children to be shown all the resources needed to plant cress without being told what they are going to do with them. They are to discuss what the task could be and explore their prior knowledge about plants. What is cress? How do you think it grows? Can we eat cress or is it inedible? After teacher modelling of different scenarios, children to make a prediction to display what conditions they think a plant needs to grow. Children to work in teams to create different growing scenarios for the cress. <ol style="list-style-type: none"> 1. Cress given water, light and grown in a petri dish. 2. Cress given water, no light and grown in a petri dish. 3. Cress given no light and no water. After making their prediction pupils to explore what a plant actually does needs to grow by observing plants at different stages. (Use of real plants/flowers to observe them as a seed, a shoot and a growing plant).

						<p>Y1- Pupils to write what plants need to grow and draw pictures of a healthy and unhealthy plant.</p> <p>Y2- Pupils to write about what a plant needs to grow and what happens if a plant doesn't get what it needs. Pupils to also included labelled pictures.</p>
<p>Lesson 5: To analyse my results.</p>	<p>Did the cress grow as expected?</p>	<p>Observe and describe how seeds and bulbs grow into mature plants.</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p>	<p>investigate predict observe conclude healthy unhealthy light water nutrients food growth conditions diary</p>	<p>GD: Children will be able to explore what happens when a plant doesn't get everything it needs to grow. They will be able to recall and explain anomalies and what could have caused these.</p> <p>SEND: Recall what a plant needs to grow and explain what has happened during their investigation.</p>	<p>Children may confuse the conditions their cress have grown in.</p> <p>Children's results may be different to their predictions which could confuse them.</p> <p>Children may not believe what a plant needs to grow if their cress does not grow as expected.</p>	<p>Lesson 5:</p> <p>Pupils to observe the changes to their group's cress over the past week. They are to draw what the cress looks like in each of the petri dishes after approximately 7 days.</p> <p>Children will write about what has happened to each of their scenarios to decide if their results matched their predictions.</p> <p>Y1- Children will write a full sentence to describe each of their scenarios and why they think they have grown, not grown, died.</p> <p>Y2- Children will write sentences to describe what happened in each of their scenarios, they will include why they think this happened as well as explain any anomalies. Children will then create a how to grow a plant guide.</p>
<p>Lesson 6: To observe changes over time.</p>	<p>Why did the bean grow in this way?</p>	<p>Observe and describe how seeds and bulbs grow into mature plants.</p>	<p>investigate predict observe conclude healthy unhealthy light water nutrients food growth conditions</p>	<p>GD: Children will use their knowledge to complete task with independence and include key vocabulary in their answers/findings.</p> <p>SEND: Children will use visual prompts to recall</p>	<p>Children's misconceptions from previous will be identified to form the activities for this session.</p> <p>These may include confusing what a plant needs to grow.</p>	<p>Lesson 6:</p> <p>Children to observe changes to their beans over the past couple of weeks. They are to draw their bean at the start and the growth/height of their bean now. (Pupils to use long pieces of paper to draw the height and compare with each other.)</p> <p>Pupils to complete recap activities outdoors (weather dependent) for the rest of the session. Pupils to be given a task sheet to complete their answers on.</p>

			diary	key facts about plants from this half term.	They may confuse some of the functions of the different parts of a plant.	<p>Year 1 to focus on: Identify and name common wild and garden plants including deciduous and evergreen trees.</p> <p>Year 2 to focus on: 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>Identify and describe the basic structure of a variety of common flowering plants/trees Key focuses to include: Matching vegetables to where they come from cards. Plant drawing/labelling. Plant hunt to observe changes over time. Leaf rubbing.</p>
Lesson 7: To demonstrate my knowledge of plants.	What have I learnt about plants?	<p>Year 1: Identify and name common wild and garden plants including deciduous and evergreen trees.</p> <p>Identify and describe the basic structure of a variety of common</p>	<p>Assessment will cover all aspects of plants for each year group. Children should be aware and be able to take part in discussion using many of the key words below. investigate predict observe conclude healthy unhealthy light water nutrients food</p>		<p>Misconceptions around plants to be addressed as part of assessment. Children to go through assessment during the session to discuss reasoning behind their answers and recap tasks to be included.</p>	<p>Pupils to complete Twinkl assessment on plants focusing on their year group.</p>

		flowering plants/trees Year 2: 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.	growth conditions diary tree plant petal flower roots seed water nutrients light stem pollen trunk leaves branch evergreen season deciduous			
Context (big picture learning) This learning expands what the children already know about different materials and their properties. It provides opportunities for them to explore different materials practically, learning about why certain materials are chosen to make certain objects in everyday life.						

Link to resources: [Trust Shared – Primaries – Departments - KS1 – Planning Cycle B – Summer 1 - Science](#)