


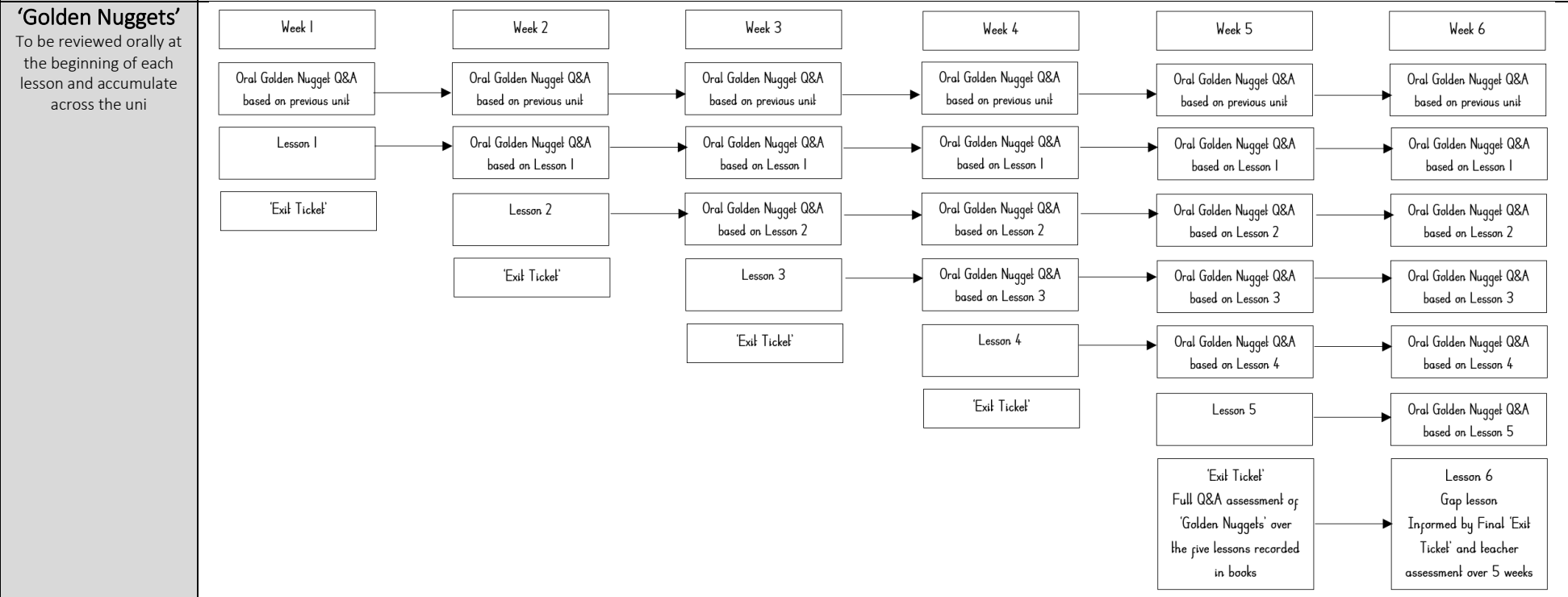


## Netherton C of E Primary Subject: Science - Plants



Year: 1	Big Question: What are plants and what do they need to grow?
<b>Context and curricular links</b>	<p><b>Prior units and knowledge:</b> 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); Recognise some environments that are different to the one in which they live (Reception – Living things and their habitats).</p> <p><b>Future learning:</b> 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); Investigate the way in which water is transported within plants (Y3 - Plants).</p>
<b>School values, spirituality and school vision</b> 	<p><b>Fairness:</b> Fairly treating all living things.</p> <p><b>Acceptance:</b> Accepting that sometimes, plants die due to lack of nourishment and the wrong conditions.</p> <p><b>Perseverance:</b> Persevering when waiting for bulbs to grow in the springtime.</p> <p><b>Respect:</b> Respect for nature – admiring and observing flowers without picking them.</p> <p><b>Forgiveness:</b> Forgiving the cold weather for damage it can often cause – killing / damaging plants (farmers).</p> <p><b>Positivity:</b> Positively anticipating spring and the new life.</p>
<b>Key Milestones for the unit</b>	<p><b>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</b></p> <p><b>Identify and describe the basic structure of a variety of common flowering plants, including trees.</b></p> <p>Ask simple questions and recognise that they can be answered in different ways.</p> <p>Gather and record data to help in answering questions.</p> <p>Identify and classify.</p> <p>Observe closely, using simple equipment.</p> <p>Use observations and ideas to suggest answers to questions.</p>
<b>Essential Information for Teachers</b>	<p><b>Common Misconceptions:</b></p> <ul style="list-style-type: none"> <li>• plants are flowering plants grown in pots with coloured petals and leaves and a stem</li> <li>• trees are not plants</li> <li>• all leaves are green</li> <li>• all stems are green</li> </ul>

- a trunk is not a stem
- blossom is not a flower



'Golden Nugget' based on previous unit	<b>What do plants and trees look like?</b> Plants and trees can have various parts: leaves, flowers, stems, roots, branches, trunk.
'Golden Nugget' based on Lesson 1	<b>Are all plants the same?</b> All plants are made up of similar parts, but they often look different. They may: be different sizes; have different sized and shaped leaves; have different sized, shaped and coloured petals; have flowers; have no flowers; and have different textures.
'Golden Nugget' based on Lesson 2	<b>Are all seeds and bulbs the same?</b> Seeds and bulbs can come in all sizes, shapes, colours and textures.
'Golden Nugget' based on Lesson 3	<b>What are the main parts of a flowering plant?</b> Leaves, flowers, stem, roots, fruit
'Golden Nugget' based on Lesson 4	<b>What are the names of some common garden and wild plants?</b> Wild plants: daisy, dandelion, buttercup, nettles, grass Garden plants: rose, pansy, iris, sunflower, sweet pea, lavender, clover, grass
'Golden Nugget' based on Lesson 5	<b>Are all trees the same?</b> Evergreen trees keep their leaves all year round; deciduous trees shed their leaves during the autumn.

'Golden Nugget' based on Lesson 6	<p><b>What foods can we get from plants?</b>  All of the fruit and vegetables we eat come from plants. Fruit that grows from some plants contains their seeds, which, if planted, can grow into new plants with more fruit. All fruits (apart from peanuts – yes, they are a fruit!) grow above ground. Vegetables come from different parts of the plant. Sometimes we eat the whole plant; sometimes we can only eat part of it.</p>
'Golden Nugget' based on Lesson 7	<p><b>How can we sort and compare plants?</b></p> <ul style="list-style-type: none"> <li>• What size the leaves are</li> <li>• Whether they have leaves or spines</li> <li>• Whether they have flowers</li> <li>• What colour the flowers are</li> <li>• Whether they are evergreen or deciduous</li> <li>• Whether they are fruits or vegetables</li> <li>• Whether they grow below ground or above ground</li> <li>• Whether they are wild or garden plants</li> <li>• Whether they have branches</li> <li>• Whether they have berries</li> <li>• Whether they have a trunk or a stem</li> </ul>
'Golden Nugget' based on Lesson 8	<p><b>Do all plants grow in the same way?</b>  If they have what they need, plants will grow, but all plants look different and grow at different rates.</p>
'Golden Nugget' based on Lesson 9	<p><b>What do beans need to grow?</b>  Beans require sunlight, soil and water to grow successfully.</p>

Week 1	Key Question for Lesson 1: Are all plants the same?	Key Vocabulary
<p><b>Key Milestone:</b> Identify and describe the basic structure of a variety of common flowering plants  <b>Secondary Milestone:</b> Observe closely, using simple equipment</p> <p><b>Resources:</b> magnifying glasses, 5 different types of fully-grown plants (could use photo pack, but real plants are better)</p> <p>- <b>Remember It:</b> Before any discussion or input, get the children to complete the 'prior unit exit ticket', detailing what they believe a plant and a tree to look like. Remind them to include all of the parts they observed in Foundation Stage. Once completed independently, discuss this as a class, showing either fully-grown plants brought in or images from the photo pack. <i>Can you name any of these plants?</i></p>		<ul style="list-style-type: none"> <li>• plants</li> <li>• planting</li> <li>• grow</li> <li>• soil</li> <li>• pots</li> <li>• observations</li> <li>• similar</li> <li>• different</li> </ul>
		<b>Evaluation</b>

- **Perfect Plants:** Introduce the Perfect Plants eBook, whether this be on the screen or printouts of the PDF version. Share read up to the end of page 4 and discuss what the children would like to learn more about. Record some class questions on your curriculum display board if that's how you use it.

- **Comparing Plants:** Discuss the definitions of the key words 'similar', 'different' and 'observation'. As a class, come up with some suggestions of what they could observe when they look at the plants. Assign different tables a different type of plant and allow groups to move to one station at a time (or move the plants instead) to observe the plants – use magnifying glasses to observe small details. Supply the children with word banks to use (verbally) when observing the different types of plant. Encourage the children to look carefully at the plants, observing their colour, size, shape and texture. Take photographs of the activity to stick in their books as evidence.

*If you're using live plants, ensure that the children understand how to handle them, are supervised doing so, and are reminded not to taste or eat part of the plant.*

- **Similar or Different?:** Come back together as a class and share observations – allow the children to bring their word mats to the carpet. *Which plants are the most similar? Why do you believe this? Which plants are the most different? How? What observations did you make? Are all plants the same? Why not?*

#### Cross Curricular Links

English: Shared reading

#### 'Exit Ticket'

Children draw some of the observations they made: the different shaped / sized leaves or petals etc., showing that not all plants are the same.

Draw your plant observations:

Exit Ticket

**Key Milestone:** Identify and describe the basic structure of a variety of common flowering plants

**Secondary Milestone:** Observe closely, using simple equipment

**Resources:** water, labels, magnifying glasses, different seeds and bulbs for planting (suggested: beans, tomatoes, sunflower, carrot, quick grow salad seeds, wildflower seeds, onion, garlic), seeds and bulbs for observing (could use photo pack), pots, soil.

- **Concept Cartoon:** Display a picture of a person / character stating that “all plants are the same”. *Do you agree or disagree? What evidence do you have?* Children to ‘prove it’, recalling what they observed last lesson.

- **Observing Seeds and Bulbs:** Share read information about seeds and bulbs (see slides 15-18 of PPT in ‘1 – Making Observations’ folder).

- **Comparing Seeds and Bulbs:** Review the definitions of the key words ‘similar’, ‘different’ and ‘observation’. As a class, come up with some suggestions of what they could observe when they look at the seeds and bulbs. Assign different tables a different type of seed or bulb and allow groups to move to one station at a time (or move the seeds and bulbs instead) to observe the seeds and bulbs – use magnifying glasses to observe small details. Supply the children with images of what the seeds and bulbs grow into, along with word banks to use (verbally) when observing the different types of seed and bulb. Encourage the children to look carefully at the seeds and bulbs, observing their colour, size, shape and texture. Take photographs of the activity to stick in their books as evidence.

- **Similar or Different?:** Come back together as a class and share observations – allow the children to bring their word mats to the carpet. *What observations did you make? Are all seeds and bulbs the same? Why not?*

*Please be aware that some bulbs can cause skin irritation and are poisonous. It is important that all children are supervised by an adult and advised that the children do not handle the bulbs independently.*

- **Planting Seeds:** Explain to children that they will be planting seeds or bulbs to observe growing over the next few weeks. Children draw and label the seeds or bulbs they will be planting on page 2 of their Plant Diary (see resource in ‘1 – Making Observations’ folder). After, share read and follow the instructions (see slide 22 of PPT in ‘1 – Making Observations’ folder) to plant the seeds. Depending on resources, you may wish for children to plant a seed each, in small groups or one as a whole class.

*When planting the seeds, ensure that children are well-supervised and remind them not to put any of the seeds near or into their mouths and to wash their hands thoroughly once they finish planting.*

- **Plant Diary:** Children draw how their plant looks today in their Plant Diary.

- plants
- seeds
- bulbs
- planting
- grow
- soil
- pots
- observations
- similar
- different

#### Evaluation

- **Predictions:** Ask children what they think will happen to the seeds now that they have been planted. Ask them what changes they will expect to see. Children could, if there is room, draw their prediction based on what might happen next.

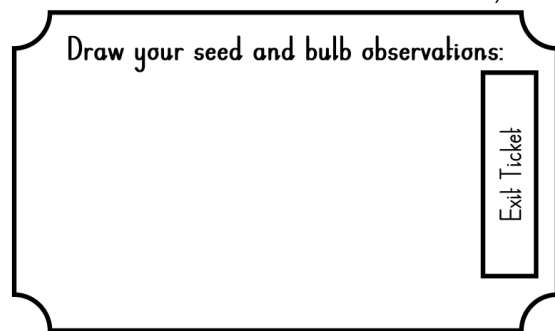
**Cross Curricular Links**

**English:** Shared reading

**Maths:** Comparing and ordering by size, using vocabulary such as 'bigger', 'smaller', 'larger', 'biggest', 'smallest'

**'Exit Ticket'**

Children draw some of their observations, showing how not all seeds and bulbs are the same.



Week 3	Key Question for Lesson 3: What are the main parts of a plant?	Key Vocabulary
	<p><b>Key Milestone:</b> Identify and describe the basic structure of a variety of common flowering plants, including trees</p> <p><b>Secondary Milestone:</b> Observe closely, using simple equipment</p> <p><b>Resources:</b> fully-grown flowering plants that are easily removed from their pots</p> <p>- <b>Remember It:</b> Allow children to observe their growing seeds and compare what they can see to their predictions / prediction drawings they recorded at the end of last lesson. Children complete a quick observational drawing in their Plant Diary. <i>How might it look different next week?</i> Review prior learning (see slides 5-6 of PPT in '2 – Parts of a Plant' folder'.</p> <p>- <b>Perfect Plants:</b> Read from page 5 to the end of page 10 of the eBook, then match photographs of seeds to the name of the plant they come from (see slide 8 of '2 – Parts of a Plant' PPT).</p> <p>- <b>Parts of a Plant:</b> Look closely at the parts of a plant (see aforementioned PPT), allowing children to match each part to its name. Illicit ideas about the jobs of the plant parts, before reading about them.</p>	<ul style="list-style-type: none"> <li>• roots</li> <li>• stem</li> <li>• leaves</li> <li>• flowers</li> <li>• petals</li> <li>• fruit</li> <li>• seed</li> <li>• bulb</li> <li>• observe</li> <li>• similar</li> <li>• different</li> </ul>
		<b>Evaluation</b>

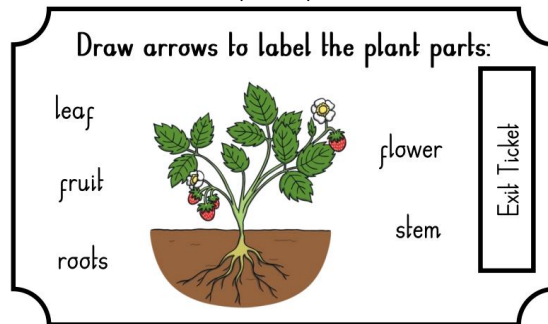
- **Looking Closely:** Ask the children to look at the real plants (or photos from the photo pack) in groups. Explain that you want them to compare how the parts are the same or different, using prompts (see aforementioned PPT).
- **Naming Plant Parts:** Children make an observational drawing of one plant and add labels for each part on the 'Parts of a Plant' activity sheet (found in '2 – Parts of a Plant' folder). More able children can record the jobs of the plant parts. If using real plants, the plants will need to be carefully removed from the pots by an adult so that the children can study the roots.
- **Sorting Plants:** Recap the parts of the plant with the children and discuss, with examples, the fact that plants have mainly the same parts but – as supported by observations from Lesson 1 – these can look different for each plant. Place 2 large sorting hoops on the carpet / a table and ask pairs to decide how the plants could be sorted. *Where might this plant go? Why? Could you sort the plants in a different way? Now where would this plant belong? Why?* Photograph this for books.

**Cross Curricular Links**

**English:** Shared reading

**'Exit Ticket'**

Children match the plant part labels to the correct plant parts on the diagram.



Week 4	Key Question for Lesson 4: What are the names of some common garden and wild plants?	Key Vocabulary
	<p><b>Key Milestone:</b> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p><b>Secondary Milestone:</b> Observe closely, using simple equipment</p> <p><b>Resources:</b> magnifying glasses, iPad camera, clipboards, pencils</p> <p>- <b>Remember It:</b> Allow children to observe their growing seeds. <i>Does it match what you predicted you would see?</i> Children complete a quick observational drawing in their Plant Diary. <i>What do you expect to see next week? Why?</i> Review prior learning (see slides 5-6 of PPT in '3 – Garden &amp; Wild Plants' folder'.</p>	<ul style="list-style-type: none"> <li>• garden plants</li> <li>• wild plants</li> <li>• daisy</li> <li>• dandelion</li> <li>• buttercup</li> <li>• nettle</li> <li>• rose</li> </ul>

<p>- <b>Perfect Plants:</b> Read from page 11-20 of the eBook to find out about garden plants and wild plants.</p> <p>- <b>Where Do Plants Grow?:</b> Review information read about garden plants and wild plants, and discuss where they might see these plants growing. <i>What are the differences between garden plants and wild plants?</i></p> <p>- <b>Garden Plants:</b> Identify and describe different plants that might be found in gardens and maintained parks (use slides 11-15 on the '3 – Garden &amp; Wild Plants' PPT). Explain – with the example of grass – that some plants can be garden plants <u>and</u> wild plants. <i>Do you know any names of other garden plants?</i></p> <p>- <b>Wild Plants:</b> Identify and describe different plants that might grow wild (use slides 16-18 on the '3 – Garden &amp; Wild Plants' PPT). <i>What other wild plants do you know of?</i></p> <p>- <b>Types of Plants:</b> Recap learning so far. <i>What have we learnt so far about garden plants and wild plants? What garden plants can you recall? What wild plants can you recall? What can be both?</i></p> <p>- <b>Going on a Plant Hunt:</b> Take the children on a plant hunt around the school. Encourage the use of magnifying glasses (where required) and the 'Plant Identification Key'. Children make observational drawings – garden plants on one side of the paper and wild plants on the other side. These can then be stuck into books. Take photographs of the activity to accompany their drawings and to photograph any plants that cannot be identified.</p> <p style="text-align: center;"><i>Supervise children when near some wild plants – nettles, for example – to avoid any stings etc.</i></p> <p>- <b>What Did We Find?:</b> Discuss the types of plants found and whether they are wild or garden plants. If possible so soon, view the photographs as you discuss the activity and use the Internet to identify any plants that were not featured on the 'Plant Identification Key'.</p>	<ul style="list-style-type: none"> <li>● pansy</li> <li>● iris</li> <li>● sunflower</li> <li>● sweet pea</li> <li>● lavender</li> <li>● clover</li> <li>● grass</li> <li>● identify</li> </ul>
<b>Evaluation</b>	
<b>Cross Curricular Links</b>	
English: Shared reading	
<b>'Exit Ticket'</b>	
Children circle garden plants in blue and wild plants in green.	



Circle garden plants **blue** and wild plants

green:

daisy

dandelion

rose

pansy

nettle

Exit Ticket

Week 5	Key Question for Lesson 5: Are all trees the same?	Key Vocabulary
	<p><b>Key Milestone:</b> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p><b>Secondary Milestone:</b> Identify and classify</p> <p><b>Resources:</b> magnifying glasses, sorting hoops</p> <p><b>Useful Links:</b></p> <p>- <a href="https://www.bbc.co.uk/teach/class-clips-video/science-ks1-ks2-ivys-plant-workshop-are-plants-the-same-all-year-round/zdvct39">https://www.bbc.co.uk/teach/class-clips-video/science-ks1-ks2-ivys-plant-workshop-are-plants-the-same-all-year-round/zdvct39</a></p> <p>- <a href="https://www.youtube.com/watch?v=zdKYWiVy9FY">https://www.youtube.com/watch?v=zdKYWiVy9FY</a></p> <p>- <b>Remember It:</b> Allow children to observe their growing seeds. <i>Does it match what you predicted you would see?</i> Children complete a quick observational drawing in their Plant Diary. <i>What do you expect to see next week? Why?</i> Recall information about wild plants and garden plants, challenging children to suggest the missing information (see slides 6-7 on the '4 – Terrific Trees' PPT), before revealing the answers. <i>Has anybody identified these plants in their gardens / on their way to school since learning about them?</i></p> <p>- <b>Perfect Plants:</b> Read pages 21-30 of the eBook to find out about trees.</p> <p>- <b>The Parts of a Tree:</b> Discuss new knowledge from the eBook. With a partner, children use photographs (see '4 – Terrific Trees' PPT) to name each part of the tree. Explain that some trees grow fruit, nuts, cones and what these are for. Explain that not all nuts and fruits can be eaten by people (and that some people have allergies).</p> <p>- <b>Deciduous Trees:</b> Look at the oak tree through the seasons (see '4 – Terrific Trees' PPT), making reference to their 'Seasonal Changes' units of work, and watching <a href="https://www.youtube.com/watch?v=zdKYWiVy9FY">https://www.youtube.com/watch?v=zdKYWiVy9FY</a>. Children can try to name the deciduous trees shown, using the picture clues to help them. <i>What <u>might</u> an evergreen tree be?</i></p>	<ul style="list-style-type: none"> <li>• tree</li> <li>• roots</li> <li>• leaves</li> <li>• fruit</li> <li>• deciduous</li> <li>• evergreen</li> <li>• nuts</li> <li>• cones</li> <li>• trunk</li> <li>• bark</li> <li>• branches</li> <li>• blossom</li> <li>• identify</li> <li>• identification</li> <li>• oak</li> <li>• horse chestnut</li> <li>• cedar</li> <li>• beech</li> <li>• maple</li> <li>• hawthorn</li> <li>• sycamore</li> </ul>

- **Evergreen Trees:** Look at the pine tree through the seasons (see '4 – Terrific Trees' PPT), reminding children that evergreen trees keep their leaves all year round. Children can try to name the evergreen trees shown, using picture clues to help them. *What is the difference between an evergreen tree and a deciduous tree?*

- **Tree Identification:** Explain to the children that different parts of a tree can be used to help us to identify it. Show the children the leaves (see '4 – Terrific Trees' PPT) and discuss how the leaves of each tree are different. *How would you describe each leaf? How are they similar? How are they different?*

- **Which Tree Is It?:** Explain to the children that they are going to be investigating which trees are in their local area using the Tree Identification Key. Take the children into the school environment with supervision to look at the trees there. If there are fallen leaves available for collecting, the children could use these to observe the leaves more carefully, using magnifying glasses. Please don't let them pick leaves from the trees. *Which tree do you think this leaf came from? What tree do you think that is? How have you used the identification key to find out the type of tree this is? What are the tree's leaves like?*

- **Tree Leaf Sorting:** Ask the children to work in pairs to sort the leaves shown (see '4 – Terrific Trees' PPT). They can choose the groups they sort the leaves into but must be able to justify their sorting choices. This could be done with sorting hoops or A3 Venn diagrams. Take photographs for their books.

- **Leaf Rubbings:** If there is time, and if you collected any fallen leaves, allow the children to do some leaf rubbings, labelling the type of tree the leaf came from.

- holly
- yew
- spruce
- cypress

### Evaluation

### Cross Curricular Links

English: Shared reading

### 'Exit Ticket'

Children draw two different trees during winter: an evergreen tree and a deciduous tree.

Draw what evergreen and deciduous trees look like in winter:

evergreen tree	deciduous tree
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Exit Ticket

Week 6	Key Question for Lesson 6: What foods can we get from plants?	Key Vocabulary
<p><b>Key Milestone:</b> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p><b>Secondary Milestone:</b> Identify and classify</p> <p><b>Resources:</b> a variety of a fruit and vegetables (including stem, leaf, flower and root vegetables, sorting hoops</p> <p>- <b>Remember It:</b> Allow children to observe their growing seeds. <i>Does it match what you predicted you would see?</i> Children complete a quick observational drawing in their Plant Diary. <i>What do you expect to see next week? Why?</i> Recap on trees learnt in the previous lesson using images (see '5 – Fruit &amp; Vegetable Plants' PPT) and discuss whether they are evergreen or deciduous, encouraging children to explain how they know.</p> <p>- <b>Perfect Plants:</b> Read pages 27-34 of the eBook to find out about fruit and vegetable plants.</p> <p>- <b>Vegetables:</b> Use images (see '5 – Fruit &amp; Vegetable Plants' PPT) to teach the children the names of some vegetables and to introduce them to the part of the plant each one is. <i>What vegetable plants are you familiar with?</i></p> <p>- <b>Fruit:</b> Explain how fruit often contains a plant's seeds. Then, use the images (see '5 – Fruit &amp; Vegetable Plants' PPT) to teach the children the names of some fruit. <i>What fruits are you familiar with?</i></p> <p>- <b>Observing and Comparing:</b> Using the prompts (see '5 – Fruit &amp; Vegetable Plants' PPT), children work together to look closely at different photographs of fruit and vegetables, identify them and describe their similarities and differences. Finally, they decide how to sort them into a table. Photograph these for their books.</p> <p>- <b>Naming and Sorting Plants:</b> Trim down 'Fruit and Veg Plants' sheets for children to first identify the plants, then allow them to sort them into different groups.</p> <p>- <b>Different Groups:</b> Using two large sorting hoops, without telling the children how you want them sorted, challenge them to sort fruit and vegetable pictures. <i>How have we / are we sorting them? Is that the only way to sort them? How else could we group the pictures?</i> Children may suggest sorting them by shape, colour, taste (if you have tasted some), or even whether they grow above ground or below ground.</p>		<ul style="list-style-type: none"> <li>● root</li> <li>● stem</li> <li>● fruit</li> <li>● vegetables</li> <li>● leaves</li> <li>● flower</li> <li>● seeds</li> <li>● sort</li> <li>● group</li> <li>● observe</li> <li>● identify</li> <li>● similar</li> <li>● different</li> </ul>
		<b>Evaluation</b>
<b>Cross Curricular Links</b>		
<b>English:</b> Shared reading		
<b>'Exit Ticket'</b>		
Children draw some examples of fruits and vegetables.		

Draw examples of fruits and vegetables:

fruits	vegetables	Exit Ticket
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Week 7	Key Question for Lesson 7: How can we compare and sort plants?	Key Vocabulary
	<p><b>Key Milestone:</b> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p><b>Secondary Milestone:</b> Use observations and ideas to suggest answers to questions</p> <p><b>Resources:</b> a variety of live plants, sorting hoops</p> <p>- <b>Remember It:</b> Allow children to observe their growing seeds. <i>Does it match what you predicted you would see?</i> Children complete an observational drawing in their Plant Diary, before discussing the following questions with a partner: <i>Are they all the same? Does your plant have leaves and flowers? Which part of your plant grew first? How are the plants similar or different?</i> Recap on previous learning using images (see '6 – Comparing Plants' PPT) discussing the answers to the questions together.</p> <p>- <b>Perfect Plants:</b> Read pages 35-40 of the eBook together, reviewing everything the children have learnt so far with the quiz and discussing the meanings of any unfamiliar words using the glossary.</p> <p>- <b>Comparing Plants:</b> Explain the meaning of the word 'compare'. Use photographs (see slides 14-17 on '6 – Comparing Plants' PPT) to compare the plants they see. Allow the children time to discuss what they can see in pairs. Use the similarities and differences lists to assess each time. <i>Are there any we missed? Are there any extra similarities or differences we suggested?</i> Now show the children (see slides 18-19 on '6 – Comparing Plants') how they can be sorted into different groups using the similarities and differences they identified. Repeat this with vegetable plants.</p> <p>- <b>Comparing and Sorting:</b> Children work in pairs or small groups to compare the plants, using the Photo Pack and supported by suitable real-life plants if available. Children can (if necessary) use the Question Cards to help them compare the plants, before choosing how to sort them, using (if necessary) the Group Labels, then sorting them accordingly.</p> <p>- <b>How We Sorted Plants:</b> Allow the children to share how they sorted the plants. <i>Do you agree with how [child] has sorted the plants? Are they correct? What other plant might belong in that group? Why?</i></p>	<ul style="list-style-type: none"> <li>• plant</li> <li>• wild plant</li> <li>• weed</li> <li>• garden plant</li> <li>• deciduous</li> <li>• evergreen</li> <li>• roots</li> <li>• stem</li> <li>• leaves</li> <li>• flowers</li> <li>• fruit</li> <li>• compare</li> <li>• similar</li> <li>• different</li> <li>• sort</li> <li>• groups</li> </ul>
		<b>Evaluation</b>

<b>Cross Curricular Links</b>	
English: Shared reading	
<b>'Exit Ticket'</b>	
Children assess whether the plants have been correctly sorted, ticking or crossing the plants accordingly.	

Week 8	Key Question for Lesson 8: Do all plants grow in the same way?	Key Vocabulary
	<p><b>Key Milestone:</b> Identify and describe the basic structure of a variety of common flowering plants</p> <p><b>Secondary Milestone:</b> Ask simple questions and recognise that they can be answered in different ways</p> <p><b>Resources:</b> mini whiteboards and pens, beans, transparent cups, compost, small watering cans (if available) sticky labels, lolly sticks</p> <p>- <b>Asking Questions:</b> Introduce children to the equipment they will be using in the session today. With a partner, children generate ideas for using the equipment. Model how to frame these ideas as questions to be asked, and record. In particular, draw out the following questions for investigation later in the lesson:</p> <ul style="list-style-type: none"> <li>• <i>What will happen if we don't put the bean in any soil?</i></li> <li>• <i>What will happen if we don't give the bean any water?</i></li> <li>• <i>What will happen if we leave the bean in the dark?</i></li> </ul> <p>- <b>Planting Beans:</b> On whiteboards, children write or draw what they think they will need to do to the bean to make it grow. Next, go through the instructions for planting a bean step by step, inviting individual children to give the next instruction, and other children to model the steps using the equipment.</p> <p>- <b>Planting Beans:</b> Children plant their own beans, water them and place them in a sunny spot. Ensure each pot is labelled with the child's name.</p>	<ul style="list-style-type: none"> <li>• bean</li> <li>• water</li> <li>• plant</li> <li>• grow</li> <li>• growth</li> <li>• conditions</li> <li>• soil</li> <li>• sunlight</li> </ul>
		<b>Evaluation</b>

- **How to Plant a Bean:** Model activity: order the 4 images taken from the My Diary of a Bean Plant activity sheet, then record a simple instruction sentence next to the first one.

- **How to Plant a Bean:** Children write an equipment list, order the 4 images taken from the My Diary of a Bean Plant activity sheet, then record instruction sentences next to each image. **WISH FOR BOOKS:** Draw a picture of what you predict your bean plant to look like after 6 weeks of growth.

**MONITOR THE GROWTH OF THE BEAN PLANT OVER TIME, TEACHING OTHER LESSONS INBETWEEN IF REQUIRED.**

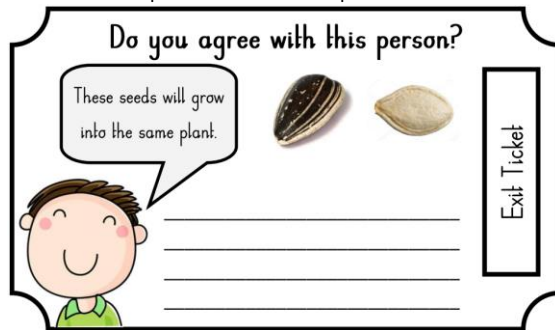
- **What Will Happen If...?:** Return to the questions generated by the children at the beginning of the lesson. In pairs, children discuss how to find an answer to the questions. Follow the PPT to set up experimental beans to test these questions. If the children have generated interesting questions in addition to those featured, set up simple experiments to investigate these also.

**Cross Curricular Links**

**English:** Shared reading

**'Exit Ticket'**

Children respond to a concept cartoon about seeds and what they grow into.



Week 9	Key Question for Lesson 9: What do beans need to grow?	Key Vocabulary
<p><b>Key Milestone:</b> Observe closely, using simple equipment</p> <p><b>Secondary Milestone:</b> Use observations and ideas to suggest answers to questions</p> <p><b>Resources:</b> bean plants planted in Lesson 1, different kinds of cooked or tinned beans for the children to taste (green beans, cannellini beans, butter beans, haricot beans and kidney beans are good ones to try)</p>		<ul style="list-style-type: none"> <li>• bean</li> <li>• soil</li> <li>• water</li> <li>• conditions</li> <li>• sunny</li> </ul>

- **Bean Plants:** As a class, children remember the steps they followed to plant their bean plants. Invite children to describe their bean plants and how they have grown. Record vocabulary to build up a word bank that can be referred in the next part of the lesson.

- dark
- grow
- growth

- **Bean Plant Diaries:** Children monitor their bean plants for the final time, recording a picture of the bean by drawing or photographing, measuring the height of the plant with a ruler and writing a short description of the plant using words from the word bank.

- **How Do Plants Grow?:** In pairs, children predict how the experimental beans have been growing. Reveal the experimental beans and discuss reasons why they have not grown like the individual beans the children have been looking after.

- **What Do Plants Need?:** Children record the things that plants need to grow and give reasons for these.

- **Beans!** Using the PPT, show the children different kinds of edible beans and discuss what kinds of beans the children are familiar with eating. Taste the different kinds of beans, comparing flavours and textures.

**Evaluation**

**Cross Curricular Links**

**English:** Shared reading

**'Exit Ticket'**

Children give advice to someone wanting to grow a bean plant.

**What advice can you give this boy?**



I want this bean to grow into a healthy plant.

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Exit Ticket