



Science Topic Overview: **Plants (immersive, whole class exploration)**

Previous linked learning	We think we already know...	We would like to find out...
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Reception

- Explore the natural world and different materials with senses.
- Describe and explain what they can see, hear and feel when outside
- Talk about and understand a change in seasons including a change in materials as a result (e.g leaves falling from trees)
- Discuss what living things need to grow and use this knowledge to grow a plant from a seed.

(noted by teacher)

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Key Vocabulary

- Deciduous
- Evergreen
- Tree
- Leaf
- Flower
- Petals
- Fruit
- Bulb
- Seed
- Roots
- Stem
- Trunk
- branches

By the end of this unit you will be able to....

- Identify and name a variety of common wild and garden plants such as those on our school site
- Identify and sort some common features of plants to discuss 'what makes a plant a plant?' (*identify and group*)
- Describe the basic structure of a variety of common flowering plants
- Use our observation skills to ask 'What can I observe about trees?' and use this to describe the basic structure of a variety of trees
- Compare and describe deciduous and evergreen trees with a 'tree scientist'





Plants (immersive, whole class exploration) Teacher notes, medium term plan

<p>Previous linked learning Reception</p> <ul style="list-style-type: none"> - Explore the natural world and different materials with senses. - Describe and explain what they can see, hear and feel when outside - Talk about and understand a change in seasons including a change in materials as a result (e.g leaves falling from trees) - Discuss what living things need to grow and use this knowledge to grow a plant from a seed. 	<p>Autumn term in year 1 is going to be more 'immersive' in an attempt to bridge the gap between reception science and KS1 science. Children will not use their science books until the Spring term – instead, work will be gathered in a whole class science book with evidence, quotes and discussions gathered in one place. Further support on this whole class book can be discussed.</p> <p>With this change in mind, lessons should be as hands on as possible and allow plenty of exploration and high quality teacher interactions. For this plants unit, we want the children outside, gathering leaves, spotting flowers and exploring the school site. Ensure the class teacher has explored the school site first, so they are aware of the plants/trees/names of the things the children might spot and can steer the children in the right direction.</p> <p>This unit only has 5 lessons. This allows you to dedicate one lesson to your expectations in science and explain 'working scientifically' skills to the class. Show them the science display, topic overview example and take time to discuss 'what a good science lesson looks like in year 1'. You may also wish to do the topic overview in this lesson so the children know what to expect this half term. In year 1, this can be done as a whole class, with the teacher/TA writing down what is said as it is discussed.</p> <p>Lesson 2: Identify and name a variety of common wild and garden plants such as those on our school site.</p> <p>Explore the school site, and forest school if it is not an interruption, and look at the plants. Simply start by getting children to 'point out plants'. If mistakes are made, get the class to gather round and discuss as a group to see if we agree/disagree. Take photos of the plants the children spot. As you go, name as many of the plants as possible – including specific names such as daisy, dandelion etc. When back in the classroom see if the children can name any other plants (eg tulip, rose etc) discuss why we didn't see any of them in the school site? Discuss, not in too much depth, how some plants are wild (such as the ones we have seen) and some are garden – such as we plant ourselves. (observe)</p>
<p>Common misconceptions</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 - all stems are green - a trunk is not a stem - blossom is not a flower. 	<p>Lesson 3: Identify and sort some common features of plants to discuss 'what makes a plant a plant?' (identify and group)</p> <p>Recap what was found last lesson. Bring up the pictures you took and see if the children can name them. Bring up some images of garden plants to – can the children remember the difference/name them? Have some plants ready on the playground (this could vary from a blade of grass to shop bought cut flowers to a tree) visit each with the class and name some features – with each one you visit, compare to what you've already seen (e.g - its green, this one is really small but this one is taller than me) Get a TA to write down quotes from the children as you go. Finish with the question – based on what we've seen, what makes a plant a plant? Draw on everything you've talked about today. (observe, analyse)</p> <p>Lesson 4: Describe the basic structure of a variety of common flowering plants</p> <p>For this lesson, perhaps have some shop bought cut flowers in a vase – see if any children spot these in the lead up to the lesson). Discuss what we mean when we say 'flowering plant' and use the purchased flowers as an example. Perhaps show other 'flowering plants' on the board to show the variation in this term. Next, giving each table a single flower stem, get them to name parts of it. Teacher/TA to walk around with pens, adding the labels the children say as they go – to make this easier – you could split the class in half with to groups, both being led by an adult. (observe)</p> <p>Lesson 5: Use our observation skills to ask 'What can I observe about trees?' and use this to describe the basic structure of a variety of trees</p> <p>Link your learning to tree? Has this happened naturally or have the children not made the connection that trees are plants too. Do they have similar features to other plants we have discussed. Ask the children the enquiry question and take them outside. Take photos, get quotes and gather any fallen leaves/seeds etc which can be stuck into the book. After time to explore, answer the question together and label some basic features of trees. Show a variety of trees and compare how trunks/leaves/branches can look different. (observe, analyse)</p> <p>Lesson 6: Compare and describe deciduous and evergreen trees with a 'tree scientist'</p> <p>Workshop to be planned with science expert parent. Focus on evergreen and deciduous. Teacher/TA to use opportunity to get as many quotes from children which can be stuck in whole class book.</p>