

Prior learning

Year R – Jaspers Beanstalk: Growing a variety of seeds and taking care of plants. How do plants grow?
What do plants need to grow?

National Curriculum - 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.

Vocabulary

- Plants
seeds, bulb, roots, stem, leaves, petals, flower
- Trees
roots, branches, trunk, leaves, evergreen, deciduous, Maple, Holly, Pine, Oak, Willow
- Seasons – Summer, Spring, Autumn, Winter.

Snapshot overview

Name common parts of a plant

Make observations about common plants. Name and label parts of a plant & their function.

What a plant needs to grow

Know what a plant needs to grow.
Make predictions for class investigations. How will different liquids affect the growth of a plant?

Investigation

Carry out investigation into how different liquids affect the growth of a plant.

(Over a few weeks)

Make observations

Look at examples of common trees and discuss similarities and differences between them.

Identify common trees.

Name a variety of common trees and identify whether they are evergreen or deciduous.

Record findings for investigation

Record change in growth of plants over time and make observations for how the plant has changed.

Medium Term Planning

Year Group: Year 1 **Term:** Autumn 2 **Topic:** Plants

| | Learning Objective | Input (including key questions and vocabulary) | Differentiation | Key learning |
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| Session 1 | I can name common parts of a plant. | <p>Introduce new topic and teach children key vocabulary for the lesson. (See resources)</p> <p>Children to be shown common plants (images or real plants if possible). Teach names of some common plants and children to make observations about the similarities and differences between them.</p> <p>Using a labelled diagram introduce key parts of a plant (roots, stem, leaves, petals, flower).</p> <p>Activity: Children to be given images of individual parts of a plant (roots, stem, leaves, petals/flower). Children to work in mixed-ability pairs or independently to put the plant back together. Can they name/label each part of the plant?</p> <p>Challenge: Why is each part of the plant important? Watch: https://www.bbc.co.uk/bitesize/topics/zpxnyrd/articles/z3wpsbk</p> | <p>Pre-teaching of key vocabulary for children that are emerging/EAL</p> <p>Extension: Begin to explain the function of the parts of a plant.</p> | <p>Name some common plants.</p> <p>Name the parts of a common plant.</p> |

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| Session 2 | I can name and describe common parts of a plant. | <p>Recap learning from previous lesson with key vocabulary.</p> <p>As a class label image of a plant (roots, stem, leaves, petals). What is the function of each part of a plant? Re-watch: https://www.youtube.com/watch?v=bLhTgTwbyMI</p> <p>Activity in books:</p> <p>All children to draw a plant and label the different parts.</p> <p><i>Challenge:</i> What is the function of each part of the plant? Children could themselves write a sentence to explain the function of 1 part of a plant or <i>adults to scribe function of 1 part of plant e.g. 'petals are colourful to attract insects'</i></p> | Recap of new vocabulary for children that are EAL/emerging. | <p>Name some common plants.</p> <p>Name the parts of a common plant.</p> <p>Describe the function of 1 part of a plant.</p> |
| Session 3 | I know what a plant needs to grow. | <p>Recap previous learning and vocabulary.</p> <p>Watch: https://www.bbc.co.uk/bitesize/topics/zpxnyrd/articles/zxxsyrd- After watching children to recall what a plant needs to grow (water, sunlight, air, temperature, time to grow etc).</p> <p>Activity in books:</p> <p>Children to make their own poster for what a plant needs to grow (see example in folder). Emerging/Support Group – Record 2-3 needs for a plant.</p> | <p>Pre-teach of new vocabulary for children that are EAL/emerging.</p> <p><i>Challenge:</i> What would happen if a plant was not given these things?</p> | Name at least 2 things that a plant needs for it to grow. |

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| <p>Session 4</p> | <p>I can make a prediction and carry out an investigation.</p> | <p>Recap previous learning and vocabulary.</p> <p>Introduce word investigation and observation and explain that we will be carrying out an investigation to observe how different liquids will affect the growth of a plant <u>(to be carried out over a few weeks)</u></p> <p>Each class will have 4 plants, each plant will be given a different liquid (1 water, 1 orange juice, 1 milk, 1 coke). TAKE PICTURE OF PLANTS AT THE BEGINNING OF INVESTIGATION – TO GO IN BOOKS WHEN COMPLETING RESULTS.</p> <p>Key discussion points before starting investigation –</p> <ul style="list-style-type: none"> • Where will we keep the plants? • How can we make it a fair test? Apart from the liquid given all other elements of investigation should be the same for each plant. • Should we give each plant the same amount of liquid? Why? <p>Making a prediction: Model verbalising a prediction.</p> <p><u>Activity in books:</u></p> <p>Children to draw an image of a plant and pictures of each of the liquids that the different plants will be given. Next to each picture of the liquids, children to predict whether or not the plant will grow by putting a tick/cross or writing yes/no.</p> <p>All children to verbalise their predictions. This can then be written by the children or adult to scribe eg 'I predict that the plant that is given orange juice will not grow because..'</p> | <p>Pre-teaching of new vocabulary for children that are emerging/EAL.</p> | <p>Name at least 2 things that a plant needs to grow.</p> |
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| Session 5 | I can name and describe common trees. | <p>Recap previous learning and vocabulary. What has happened in our investigation so far? Can you see any changes in the plants? – Continue investigation over coming weeks.</p> <p>Teach names of common trees using images (Holly, Pine, Oak, Maple). What are the similarities and differences between them? Teach parts of common trees (roots, trunk, branches, leaves).</p> <p>Take children on walk around school grounds to look at different trees and parts of them. – Look out for evergreen trees and deciduous trees and explain meaning. Can children spot any other evergreen/deciduous trees on our school grounds?</p> | <p>Pre-teaching of vocabulary for children who are emerging/EAL.</p> <p>Extension: Start to describe common trees using new vocab evergreen/deciduous and explain what this means.</p> | Name at least 3 common trees. |
| Session 6 | I can name and describe common trees. | <p>Recap previous learning and vocabulary. What has happened in our investigation so far? Can you see any changes in the plants? – Continue investigation over coming weeks.</p> <p>Activity in Books:</p> <p>Children to be given images of common trees (Oak, Maple, Holly, Pine). In books, children to stick in image of each plant and with it record the name of the plant.</p> <p><i>Challenge:</i> Which plants are evergreen/deciduous? Children can record this themselves or to be scribed by an adult – can children explain what evergreen/deciduous means?</p> | <p>Pre-teaching of vocabulary for children who are emerging/EAL.</p> <p>Extension: Identify whether a tree is evergreen or deciduous and explain what this means.</p> | <p>Name at least 3 common trees.</p> <p>Identify an evergreen and a deciduous tree.</p> |

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| <p>Session 7</p> <p>(To be carried out when investigation has been completed).</p> | <p>I can record my findings.</p> | <p>Recap previous learning from plants topic.</p> <p>TAKE PICTURE OF PLANTS AT THE END OF THE INVESTIGATION</p> <p>What has happened in our investigation?</p> <p>Look at picture of plants that was taken at the beginning of the investigation. What has happened to the plants? How have the plants changed? Were our predictions correct? Which liquid was the best for helping a plant to grow? How do you know?</p> <p><u>Activity in books:</u></p> <p>Children to stick in 2 pictures (plants at the beginning of the investigation and the plants at the end of the investigation).</p> <p>Children to record their own observations about the plants eg. 'The plant that was given ____ grew the tallest'. The plant that was given ____ did not grow at all' etc.</p> <p>If needed: observations to be scribed by teacher/TA for some children.</p> | | |
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Impact:

- To be able to recognise and name some common trees and plants.
- To be able to recognise and name the parts of some common trees and plants.
- To know the function of different parts of common trees and plants.
- To know what a plant needs to grow.
- To be able to make a prediction and make observations for an investigation.