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| Subject: Science Year: Phase One – Plants (basic structure) Unit 4 of 6 NC/PoS: * 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.

N.B. children use magnifying glasses when observing plants outside |
| Prior Learning (what pupils already know and can do)Know the year is split into seasons and name them. That during the year a plant’s growth changes |
| End Goals (what pupils MUST know and remember)* Know flowering plants, consist of leaves, flowers (blossom on trees), petal, roots, bulb or seed, trunk, or stem
* Know wild plants, grow without human intervention, and garden plants are grown by human intervention
* Know the wildflowers – dandelion, forget-me-not, thistles, daisy, poppy
* Know the garden flowers – rose, fuchsia, geranium
* Name deciduous trees – ash, oak, beech, silver birch, alder
* Know deciduous trees shed their leaves in winter to conserve energy
* Know evergreen trees, keep their leaves throughout the year
* Name evergreen trees pine, spruce, cedar
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| Key Vocabulary: differences, similarities, wild, leaves, shape, compare, stem, flower, roots, leaves, petals, blossom, trunk, deciduous, evergreen, holly, ash, oak, beech, silver birch, alder, pine, spruce, cedar, wild, nettle, dandelion, forget-me-not, cornflower, buttercup, daisy, garden, lavender, rose, fuchsia, geranium |
| Session 1: review prior learning What are seasons? Name them. Discuss the plants children have met before.Watch careers: <https://www.youtube.com/watch?v=VaK9pgORWkc> In preparation for the next few sessions plant some beans in a clear container (one with soil and the other with white paper towels to see the roots etc.)It can be done in a sandwich bag taped to the window!Keep checking to see the roots appear etc. Could keep a class record.N.B. wash hands after touching compost |
| Session 2: Recap: Name the seasons and how plant growth changes during the yearChildren learn flowering plants, consist of leaves, flowers (or blossom on trees), petal, roots, bulb or seed, trunk, or stemLO: to observe and describe the structure of a plantUse YPTE (Young People s Trust for the Environment) power point for images of different roots, stems etcLook at the beans in the containers. What can they see?Draw and label two plants (include a tree for blossom). Show roots from other potted plants so children can see the differencesVocabulary: stem, flower, roots, leaves, petals, blossom, trunk |
| Session 3: Recap: what is the structure of a plant?Children learn wild plants, grow without human intervention, and garden plants are grown by human interventionLO: to observe plants in the local environment* Go outside looking for wild plants grown in school allotment, edge of school field and in forest - pull up weeds to look at roots to compare them.
* Has an identity sheet for wild plants – where were they found?
* Collect leaves and compare – what are their shapes? How are they similar and different?
* Which plants have flowers? How are they similar and different?

Vocabulary: differences, similarities, wild, leaves, shape, compare |
| Session 4: where are plants found in our school environment?Children learn the name of deciduous trees – ash, oak, beech, silver birch, alder and that deciduous trees shed their leaves in winter to conserve energy. Evergreen trees, keep their leaves throughout the year and examples are pine, spruce, cedarLO: Comparing types of treesWatch <https://www.youtube.com/watch?v=jFVOI9Duj8M> deciduous and evergreen treesWhy do some trees lose their leaves?Explore local environment and take photographs. Name the trees, use tree spotter guide. Sort into deciduous and evergreenVocabulary: deciduous, evergreen, holly, ash, oak, beech, silver birch, alder, pine, spruce, cedar |
| Session 5: Name some deciduous trees and those that are evergreenChildren learn to identify the following wildflowers – dandelion, forget-me-not, thistles, daisy, poppyTo identify and observe wild plants in the environment Watch <https://www.youtube.com/watch?v=37PPYxDVgMw> up to 4.40With an identification sheet children locate wildflowers in the groundsVocabulary: wild, nettle, dandelion, forget-me-not, cornflower, buttercup, daisy |
| Session 6: Name some common Bristish wildflowersChildren learn to identify garden flowers – rose, fuchsia, geranium, lavenderLo: To identify common garden plantsGarden plant – grows in a garden and has human intervention Watch <https://www.youtube.com/watch?v=jFVOI9Duj8M> from 4.40Vocabulary: garden, lavender, rose, fuchsia, geranium |
| Link to career:<https://www.youtube.com/watch?v=VaK9pgORWkc> Plant pathologistFloriculturist horticulturistplant geneticistforestry consultant  |
| Scientists who have helped develop understanding in this field: Alexander von Humboldt <https://www.youtube.com/watch?v=EzakQuKqBeQ> |