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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 |
| 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 year  Children learn flowering plants, consist of leaves, flowers (or blossom on trees), petal, roots, bulb or seed, trunk, or stem  LO: to observe and describe the structure of a plant  Use YPTE (Young People s Trust for the Environment) power point for images of different roots, stems etc  Look 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 differences  Vocabulary: 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 intervention  LO: 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, cedar  LO: Comparing types of trees  Watch <https://www.youtube.com/watch?v=jFVOI9Duj8M> deciduous and evergreen trees  Why do some trees lose their leaves?  Explore local environment and take photographs. Name the trees, use tree spotter guide. Sort into deciduous and evergreen  Vocabulary: deciduous, evergreen, holly, ash, oak, beech, silver birch, alder, pine, spruce, cedar |
| Session 5: Name some deciduous trees and those that are evergreen  Children learn to identify the following wildflowers – dandelion, forget-me-not, thistles, daisy, poppy  To identify and observe wild plants in the environment  Watch <https://www.youtube.com/watch?v=37PPYxDVgMw> up to 4.40  With an identification sheet children locate wildflowers in the grounds  Vocabulary: wild, nettle, dandelion, forget-me-not, cornflower, buttercup, daisy |
| Session 6: Name some common Bristish wildflowers  Children learn to identify garden flowers – rose, fuchsia, geranium, lavender  Lo: To identify common garden plants  Garden plant – grows in a garden and has human intervention  Watch <https://www.youtube.com/watch?v=jFVOI9Duj8M> from 4.40  Vocabulary: garden, lavender, rose, fuchsia, geranium |
| Link to career:  <https://www.youtube.com/watch?v=VaK9pgORWkc>  Plant pathologist  Floriculturist  horticulturist  plant geneticist  forestry consultant |
| Scientists who have helped develop understanding in this field: Alexander von Humboldt <https://www.youtube.com/watch?v=EzakQuKqBeQ> |