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| **Year 2: Growing Plants (Plants) UPDATED November 2023** | |
| **Links made with other subjects** | English: Instruction writing: how to plant a seed/grow a plant  English: Leaf (text) |
| **The BIG Question** | How do plants grow? What do plants need to grow? |
| **The BIG Outcome** | Write captions for pictures showing changes in the appearance and height of plants as they grow. Short explanation answering the question, using the knowledge below with a focus on water, light, space and temperature. |
| **Science objectives**  (link to NC) | - observe and describe how seeds and bulbs grow into mature plants  - find out and describe how plants need water, light and a suitable temperature to grow and stay healthy |
| **Prior knowledge**  What prior knowledge is needed for children to be successful in this unit? | *Children already know:*  EYFS – Understanding the world: Children know about similarities and differences in relation to places, objects, materials and living things. They can talk about the features of their own immediate environment and how environments might vary from one another. They can make observations of animals and plants and explain why some things occur. They can talk about changes.  Yr 1: **Plants (Plants)** |
| **Future learning**  Consider the conceptual knowledge within a subject that pupils need for future learning not just the recall of facts but the importance of concepts | This unit gives prior knowledge to:  Yr 3: **What plants need and parts of plants (Plants)** |
| **Science strands** | Related Enquiry Questions   |  | | --- | | **Classifying** | | Based on the children’s own criteria:  - classify seeds  - classify bulbs | | **Observing over time** | | - Plant seeds and bulbs and observe how they grow. | | **Pattern Seeking** | | Children generate questions for investigation such as:  - Do big seeds germinate more quickly?  - Does it matter which way round you plant a bulb or seed?  - Which comes first, the root or the shoot? | | **Comparative testing** | | Not relevant | | **Researching** | | - Look at packets to decide how to plant and care for seeds e.g. How much water do they need? Do they need shade/full sun? | |
| **Vocabulary/ Glossary** | Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, evergreen, deciduous, light, shade, sun, warm, cool, water, grow, healthy, germinate |
| **Knowledge**  (see italics for knowledge to remember) | *The knowledge that children will learn and remember:*   1. *Plants may grow from either seeds or bulbs.* 2. *These then germinate and grow into seedlings which then continue to grow into mature plants.* 3. *These mature plants may have flowers which then develop into seeds, berries, fruits etc.* 4. *Seeds and bulbs need to be planted outside at particular times of year and they will germinate and grow at different rates.* 5. *Some plants are better suited to growing in full sun and some grow better in partial or full shade.* 6. *Plants also need different amounts of water and space to grow well and stay healthy.* 7. *Plants need the right amount of water, light and a suitable temperature to grow and stay healthy.* |
| **SEND expectations** | 1. *Plants may grow from either seeds or bulbs.* 2. *These then germinate and grow into seedlings which then continue to grow into mature plants.* 3. *These mature plants may have flowers which then develop into seeds, berries, fruits etc.* 4. *Seeds and bulbs need to be planted outside at particular times of year and they will germinate and grow at different rates.* |
| **Common misconceptions** | Some children may think:  - plants are not alive as they cannot be seen to move  - seeds are not alive  - all plants start out as seeds  - seeds and bulbs need sunlight to germinate |