



## Science- Plants Rec to Y6

| SCIENCE SKILLS REC to Y6 |  |   |  |  |  |  |  |
|--------------------------|--|---|--|--|--|--|--|
| PLANTS                   |  |   |  |  |  |  |  |
|                          | EYFS Skills  | Key Stage 1 Skills  |  | Lower Key Stage 2 Skills   |  | Upper Key Stage 2 Skills   |  |
|                          | End of REC Expectations  | End of Year 1 Expectations  | End of Year 2 Expectations   | End of Year 3 Expectations   | End of Year 4 Expectations   | End of Year 5 Expectations   | End of Year 6 Expectations   |
| Identifying and naming   | <p><b><i>The World</i></b></p> <ul style="list-style-type: none"> <li>• I look closely at similarities, differences, patterns and change</li> </ul> <p><b>Early Learning Goal</b></p> <ul style="list-style-type: none"> <li>• I know about similarities and differences in relation to</li> </ul> | Identify and name common flowers and trees found growing in the locality.             | Identify what eats plants as a food source and recognise simple food chains. | Identify and describe the functions of common plant parts. Explain how their structure is suited to their function (e.g. roots are long and branched to provide good anchorage). | Identify and name a variety of plants in the local and a contrasting environment from their physical appearance.                               | Identify the key structures involved in plant sexual reproduction. | Identify plants which have survived on Earth for millions of years and how we know this.   |
| Classification           | <p>objects, materials and living things</p> <ul style="list-style-type: none"> <li>• I can talk about changes</li> </ul>   | Sort trees into groups to show those that are evergreen and those that are deciduous. | Sort seeds and bulbs into groups according to physical features.             | Sort and classify a range of seeds into broad dispersal methods, such as wind (dandelion), water (coconut) or animal (yew).  | Use classification keys to classify plants into groups, such as flowering or non-flowering plants, or compound, palmate or single blade leaves | Classify plant types according to how they reproduce.              | Devise classification keys to identify plants in the immediate environment. Give reasons for classification and understand the significance of scientists' work, from study. |



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| Plant parts and their functions |  | Identify the basic structural parts of common flowering plants and trees, including root, stem, stalk, leaves, flowers, bulb, fruit, seeds and trunk. | Describe the different plant parts and give examples of different foods that we eat which are derived from these plant parts, for example rhubarb (stem), carrot (root). | Draw a simple diagram to show how water is transported through a plant.   | identify uncommon, specialised plant parts such as tendrils and suckers and explain their functions.           | Explain why plants have flowers and why it is important for them to attract insects and other pollinators.                        | Research and describe similarities and differences between petals, leaves, stamen and stigma on a variety of plants found in the locality and elsewhere. |
| Habitats and adaptation         |  | Identify their locality as a habitat for living things.   | Explain how plants are suited to their habitats and give examples of plants growing in different habitats.   | Compare and describe how requirements for growth vary from plant to plant and how this relates to a plant's environment, such as with climbing and alpine plants. | Describe how a plant's habitat may naturally change throughout the year and how plants adapt to these changes. | Describe features of flowers, such as scent, colour, shape and size, and how they have evolved to ensure successful pollinate on. | Describe how plants have adapted and ultimately evolved to suit their environments using specific examples.  |
| Growth and survival             |  | Care for a growing seedling, observing and describing its growth.   | Describe how plants grow, identifying what a plant needs for healthy growth and survival.  | Recognise that plants make their own food necessary for growth and survival, storing it in their leaves.  | Explain how humans can impact on a plant's environment in both positive and negative                           | Describe the different ways in which new plants can be grown from the parent plant, including seeds, bulbs,                       | Suggest why some plants have survived over time and some have not.   |



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|                  |  |   |  |   | ways, giving examples from their locality.  | tubers, cuttings and grafting.  |   |
| Life cycles      |  | Identify the seeds, as part of a plant, that makes a whole new plant.                                     | Recognise that plants produce seeds in order to reproduce and generate new plants.   | Order pictures showing the stages in the life cycle of a plant.   | Explain how humans can impact on a plant's environment in both positive and negative ways, giving examples from their locality. | Describe the process of plant reproduction using the correct scientific language. Observe/comment on/record plant life cycles.                              | Define the plant terms 'annual', 'biennial' and 'perennial', describing differences in life cycles and identifying plants of each type. |
| Seasonal changes |  | Describe how plants change over time, including seasonal change (leaves fall off, blossom, buds opening). | Describe how bulbs help plants to grow in winter.                                    | Allocate different stages of a plant's life cycle to different seasons, suggesting reasons why the stages occur when they do. | Describe in detail the changes that occur in a familiar tree or plant over the seasons.   | Grow a range of plants/vegetables from seeds, cuttings, tubers and bulbs across the different seasons and note the conditions needed for successful growth. | Identify relationships between the seasons and a typical plant life cycle using observations from the school environment.               |
| comparisons      |  | Name, compare and contrast familiar plants according to their observable features.                        | Make comparisons between seeds or bulbs grown in different conditions (e.g. with and | Compare and explain the effect of different factors on plant growth, including light and nutrition.                           | Compare plants growing in a local habitat to those in a contrasting one, such as a cacti in the desert, and                     | Make comparisons between asexual and sexual reproduction in plants, suggesting reasons why plants many  | Compare native plants with non-native plants and determine whether non-native plants can be classified                                  |



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|  |  |  | without light or water). |  | notice how they are adapted. | reproduce in different ways. | in the same way as native plants. |
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