

**Science – Plants**

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**Knowledge**

**What will I know by the end of the unit?**

* I will be able to identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.
* I will have explored the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. {
* I will have investigated the way in which water is transported within plants.
* I will have explored the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal

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**Books**

**Skills**

* Classify plants using keys.
* Group plants according to their properties.
* Design an experiment to see what plants need to survive.
* I can identify parts of a plant.

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| **Vocabulary** | **Meaning** |
| **carpel** | The female part of the flower containing an egg. |
| **dispersal** | Spreading things over a wide area. |
| **fertilisation** | When pollen and an egg join together to make a seed. |
| **germination** | To cause (a seed) to start growing. |
| **nectar** | A sweet fluid in flowers that attracts insects. |
| **nutrients** | Any substance that plants or animals need in order to grow. |
| **petal** | A part of the plant that makes the flower. Often brightly coloured. |
| **photosynthesis** | The process by which a plant uses the energy from the light of the sun to produce its own food. |
| **pollen** | A powdery yellow substance from the male part of a flower. |
| **pollination** | The transfer of pollen from a male part of a plant to a female part of a plant. |
| **root** | The part of the plant that holds the plant in the soil and also takes in the nutrients and water for the plant. |
| **stamen** | The male part of a flower made up of the anther and held up by a filament. |

**What I should be able to do and know now.**

**Key skills in Science**

**What I will know and be able to do at the end of the topic.**

**Knowledge**

* I know that a plant is a living thing.
* I can label the roots, stem, flower and leaves on a diagram.
* I know that I can grow plants from seeds.
* Some plants grow in the wild.
* Plants come in lots of different sizes, colours and shapes.
* I know that plants need water, and light to survive and grow.

**Skills**

* I can explain how something works.
* I can draw diagrams.
* I can name some plants.
* I can observe differences in an experiment.
* I design an experiment to test something.

**Knowledge**

* Can you name 3 [parts of a plant and their functions?
* What are the male and female parts of a plant?
* Can you explain the process of pollination?
* The 3 types of seed dispersal are \_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_. Can you explain what each one involves?
* What part of the plant attracts the insects?
* Can you describe an experiment that would test if a plant needs light to grow? How would you make it a fair test?

**Skills**

* I can draw diagrams and label them correctly.
* I can give an explanation and a reason for this.
* I can use a classification key to identify plants.
* I can record data in an experiment.
* I can state what makes a fair test.
* I can make systematic and careful observations.
* I can set up some simple practical enquiries, including comparative tests.
* I am beginning to collect data in a variety of ways, including labelled diagrams, bar charts and tables.
* I am beginning to talk about and identify differences and similarities in the properties of materials.
* I am beginning to identify simple changes related to simple scientific phenomena.
* I am beginning to discuss criteria for grouping and sorting and can classify using a simple key.

**What I will be learning**

* To name and label the parts of a flower head.
* Where do seeds come from?
* How do plants reproduce to make more plants and spread?
* Methods of seed dispersal.
* I can name the male and female parts of a plant.
* I can explain what photosynthesis is and why a plant needs this to survive.