

**Science Knowledge Organiser**

**Year 2**

**Plants: The Apprentice Gardener**

**Summary Statement:**

Pupils recap what plants need to grow healthily and the differences between bulbs and seeds. This unit includes an investigation about growing healthy plants.

**By the end of the unit children can:**

* 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.



**bulbs**



**seeds**

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| **Key Vocabulary** |
| **Spelling** | **Definition** |
| Life Cycle | A series of changes living things go through. |
| Seed | The part of the plant from which new plants grow.  |
| Bulb | Part of a plant under the dirt that stores food while the plant is resting from growing. |
| Mature plant | A plant that is fully grown or has been growing for a long time. |
| Observations | Seeing and taking notice of something. |
| Germination | When the seed begins to grow.  |



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| **Key Knowledge** |
| All plants go through a life cycle. A circle diagram is used to show that it is a continuous process. |
| Seeds need the following to germinate:* Water
* Oxygen
* Warmth
 | Plants needs the following to grow and be healthy (LAWNS):* **L**ight
* **A**ir
* **W**ater
* **N**utrients (‘food’ absorbed by the roots)
* **S**pace
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| Healthy and unhealthy plants compared - Stock Image - C024/9334 - Science  Photo LibraryHealthy plants are green and strong but unhealthy plants are often pale, yellowy and weak.  |
| Plants grow from seeds and bulbs. Seeds are sown and bulbs are planted. They both have a store of food inside them. |
| **Germination stages:** seed is planted 🡪 absorbs water and starts to grow 🡪 roots and shoots grow 🡪 stem and leaves grow 🡪 some may grow flowers and seeds 🡪 seeds are spread by animals, humans and wind and the process starts again.  |
| Roots always grow downwards to find more water. Shoots grow upwards to find light. |