Knowledge Organiser: **Science – Plants** **YEAR 2:** Summer 2

**Scientific knowledge:**

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| Germination  When a seed soaks up moisture and grows shoots we say it has germinated.  Seeds need water in order to germinate.  Seeds do not need soil although soil absorbs water and when it surrounds the seed it helps prevent it from drying out.  Seeds do not need light in order to germinate.  Plant growth  A plant needs water, sunlight, warmth and air in order to grow.  Most plants in our country need a temperature of about 6oc to grow.  Plants do not need soil to grow although soil absorbs water and can prevent the plant from drying out.  A plant needs light in order to stay healthy. The green pigment (chlorophyll) in the leaves needs light and water to make food.  Stalks and leaves will lean towards the light. We can see this if we leave plants on a windowsill. They do this so that the leaves can reach more sunlight. |

**Basic Purposes of the Parts of a Plant**

**Stem- to hold the plant upright or support the leaves.**

**Leaves- to make the food for the plant.**

**Flowers- to make the seeds so the plant can reproduce.**

**Roots---to anchor the plant**

**--to take up water for the plant to grow.**

**Scientific Study**

**Detailed observation of change as the seeds and plants grow.**

**Asking scientific questions and testing them fairly. We make sure tests are fair by using a control. We check the accuracy of our results by repetition.**

**Key objectives:**

* 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.

**Scientific vocabulary:**

**Basic**

**(**Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud)

**Subject Specific**

**Bulb—**

**Energy—**

**Germinate—**

**Grow--**

**Shoot--**

**Challenge**

**Chlorophyll**

**photosynthesis**

…see revision diagrams on reverse

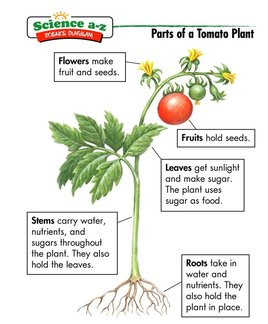
**Homework challenges:**

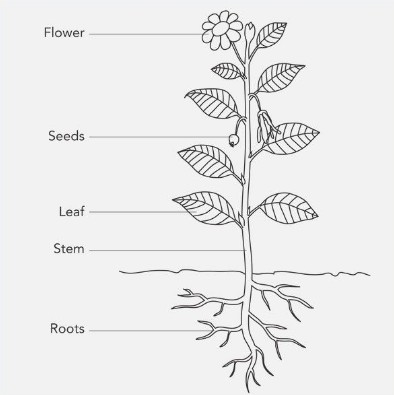
**Can you plant and look after a small patch of garden?**

**Can you plant something you will be able to eat?**

**Famous people/jobs:**

**Farmer, Garden centre manager, botanist**

 Diagrams of a plant

 Parts of a tomato plant