

# Plant Power

## Parts of a plant (Week 1) SCIENCE and Art

Children will learn about the different lines you can use to draw and use these skills to create a line drawing of a flower and label it with the parts of a plant.

- **Roots** anchor the plant to the ground and help to transport nourishment to the rest of the plant.
- **Stem** supports the plant and lifts the flowers and leaves off the ground.
- **Leaves** help with the plant using sunlight for feeding (**photosynthesis**) and for 'breathing' and drawing water from the roots (**transpiration**).
- **Flower** is used to attract animals to help with **pollination** and as part of its **lifecycle**.

## Water transportation in plants (Week 1) SCIENCE

To learn about this, the children will undertake an experiment with celery and dye.

- **Water** is absorbed by the **roots**
- Travels up the **stem** to the **leaves** and **flower**.
- **Water** leaves the plant through the **leaves**.
- **Transpiration** is the process of water leaving the plant through the **leaves**. This creates a vacuum that allows the **roots** to absorb more water.

## What a plant needs to survive and thrive (Week 3) SCIENCE

Every plant is different but they all need the same things to survive just in different amounts. All plants need:

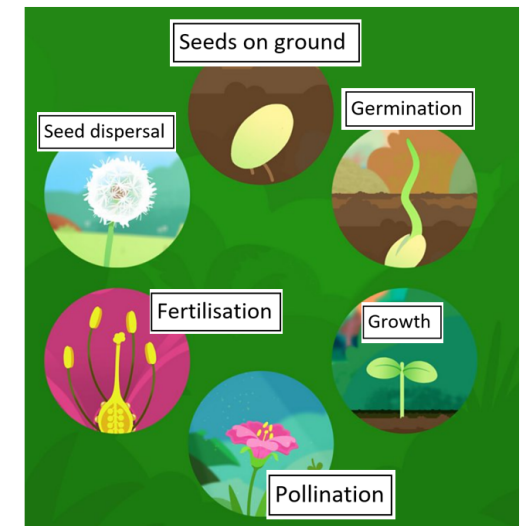
- **Water** to help soften the **seed** so it can break open and **germinate** and to help the plant **absorb** the **nutrients** from the **soil**.
- **Light** to help the plant make the **food** it needs to grow.
- **Food (nutrients)** to give the plant the **energy** it needs to grow.
- **Space** for the **roots** to spread out and find the **nutrients** in the **soil** and **space** around the **leaves** so they can access the **light**.
- **Air (oxygen)** to help the plant make the **food** it needs to grow
- The right **temperature** to help **water** move around the plant.

A cactus does not need as much water as some plants because it has a thick **stem** to store lots of **water**.

Lavender likes sandy soil because it drains well.

## Life cycle of a plant (Weeks 2 and 3) SCIENCE

There are 6 main types of seed dispersal through the wind, through water, bursting open, dropping and rolling, shaking and catching a ride on an animal.



## Climate zones (Week 4) GEOGRAPHY

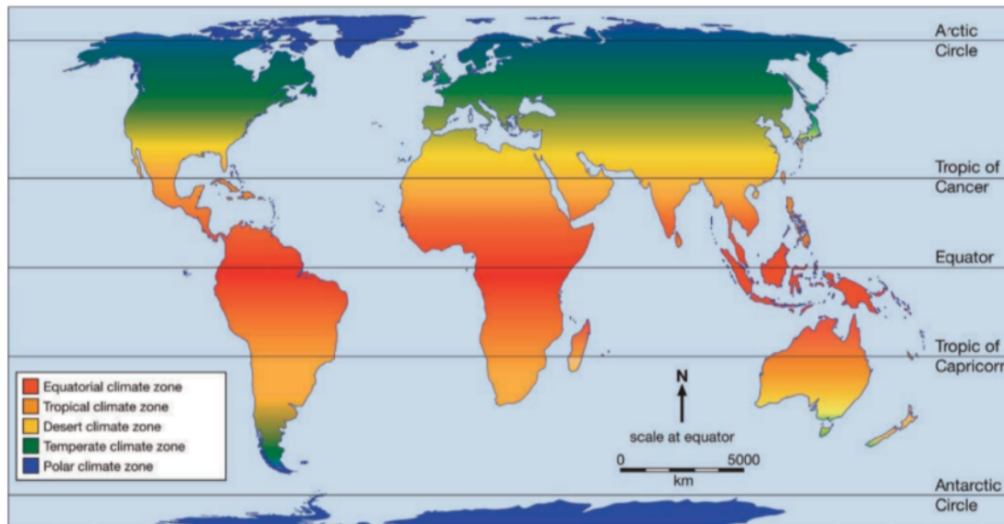
**Climate** is the average (usual) weather over a period of time. This can include:

- **Rainfall,**
- Number of hours of sunshine,
- **Temperature.**

**Climate zones are the 5 parts of the world which have similar climates.**

The **Equator** is the imaginary lines around the middle of the Earth that separates the top half of the world (**Northern Hemisphere**) with the bottom half of the world (**Southern Hemisphere**).

**The closer the place is to the equator the hotter and wetter it is and the less change there is over the course of the year. The further away a place is from the equator the colder it is.**



Climate	Rainfall	Temperature	Seasons	Plants
<b>Polar Climate</b>	Wet summers Dry winters	Always cold	2	Mainly Moss lichen
<b>Temperate Climate</b>	Variable	Variable	4	Large range of trees and crops
<b>Hot Desert Climate</b>	Very little	Very hot in day Very cold at night	2	Cacti, not many plants grouped together
<b>Tropical Climate</b>	Lots of rain in the summer, dry in the winter	Very hot	2	Grasses and bushes
<b>Equatorial Climate</b>	Very wet	Very hot	0	Tropical plants-coconut, bananas

## Human impact on the environment (Week 4) GEOGRAPHY

How humans help the environment	How humans damage the environment
<ul style="list-style-type: none"> <li>• <b>Recycle</b></li> <li>• Plant new trees</li> <li>• Walk or cycle to move around</li> <li>• Eat less meat</li> <li>• Turn off things when they are not being used</li> <li>• Share how to save the planet with others</li> <li>• Use <b>renewable energy</b> sources like <b>wind turbines</b> and <b>solar panels</b></li> </ul>	<ul style="list-style-type: none"> <li>• Throw <b>litter</b></li> <li>• Cutting down trees decreases the amount of oxygen in the world</li> <li>• Destroy green spaces and animal <b>habitats</b> in order to build new houses and roads. More animals are at risk of <b>extinction</b> because of this.</li> <li>• Burn oil and gas to produce power and using a car on a short journey increases <b>pollution</b>. <b>Pollution</b> puts more <b>carbon dioxide</b> in the air which increases <b>global warming</b>. <b>Global warming</b> has led to more <b>flooding</b> in places because the sea levels have risen as well as <b>droughts</b> and fires in others because there is less <b>rainfall</b>.</li> </ul>

