

# Powerful Plants!

A Science based topic

## What do you need to know before this topic?

I know that plants need air, water, warmth and light in order to grow and survive.

I know that seeds and bulbs can grow into plants.

I know that plants have a flower, a stem and roots.

I know that there are many types of different plants and that they grow in different environments.

## Key Assessment Questions

What are the main parts of a flower called?

What do plants need in order to grow?

How do plants spread their seeds in order to continue growing?

How are plants pollinated?

What other animals help with the pollination process?

How do plants make their own food?

How is water moved around a plant?

## Key Skills

I can identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers

I can explore 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 can investigate the way in which water is transported within plants

I can explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal

## Key Vocabulary

Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal, wind dispersal, animal dispersal, water dispersal

## Sticky Knowledge

I know that many plants, but not all, have roots, stems/trunks, leaves and flowers/blossom.

I know the roots absorb water and nutrients from the soil and anchor the plant in place.

I know that the stem transports water and nutrients/minerals around the plant and holds the leaves and flowers up in the air to enhance photosynthesis, pollination and seed dispersal.

I know that the leaves use sunlight and water to produce the plant's food.

I know that some plants produce flowers which enable the plant to reproduce.

I know that pollen, which is produced by the male part of the flower, is transferred to the female part of other flowers (pollination).

I know that pollination forms seeds that are dispersed in different ways.

I know plants require different conditions to grow.

## Curriculum Drivers

### Caring Community

I am the child who can see that plants impact our society in many ways: farming for food and providing oxygen for us to breathe and live.

### Learning & Leading

I am the child who can understand that learning about the world around us and the importance of nature, will encourage us all to preserve and protect it.

### British & Global Values

I am the child who can recognise how different plants may vary around the world and how they are best suited to their own environment.

### Wellbeing & Being Well

I am the child who can value the importance of plants as part of a healthy diet and how plants and trees can create a healthier and cleaner environment to live in.

### Enterprise & Effort

I am the child who can appreciate the time and efforts that farmers go to when producing mass crops and how this benefits us as a society.

### Identity and Uniqueness

I am the child who can see ourselves in plants: the differences, the uniqueness of each plant, the different time it takes to grow and bloom and the beauty in each plant.

Writing	Maths	RE	PE	Computing	PSHE - Jigsaw
<b>Instructions</b> On Launch Day, the children will be writing instructions for how to plant a seed! <b>Information text</b> During our Topic, we will gather lots of scientific facts about plants to present in an information text.	<b>Multiplication</b> (grid method multiplication) <b>Division</b> (short division using dienes) <b>Statistics</b> Using charts and graphs to display data <b>Money</b> How to calculate monetary amounts	<b>Judaism</b> What are important times for Jewish people? What is a Bar Mitzvah? What marriage promises do Jewish couples make? Jewish festivals	<b>Dance</b> Pupils create dances in relation to an idea. Pupils work individually, with a partner and in small groups, sharing their ideas. Pupils develop their use of counting and rhythm. Pupils learn to use canon, unison, formation and levels in their dances. They will be given the opportunity to perform to others and provide feedback using key terminology.	<b>iMotion animation</b> Using iMotion on the iPads, the children will learn how to create their own stop-motion animation of a plant growing to fit our topic.	<b>Healthy Me</b> I understand how exercise affects my body. I know how my food affects my body and how to make healthy choices with meals. I can share my attitude towards drugs. I know how to get help in an emergency. I know when a situation is safe or unsafe.