

Year 3 – Spring 2 ~ Knowledge Organiser

Enquiry Question: What do plants need to thrive?

Subject Specific Vocabulary	
Flower	These make seeds to grow into new plants. Their petals attract pollinators to the plant.
Leaves	These make food for the plant using sunlight and carbon dioxide from the air
Stem/trunk	This holds the plant up and carries water and nutrients from the soil to the leaves. A trunk is the stem of a tree.
Roots	These anchor the plant into the ground and absorb water and nutrients from the soil.
Petal	A petal is a modified leaf that protects and surrounds the reproductive parts of a flower. They are brightly coloured in order to attract pollinators, thereby enabling the process of plant reproduction.
Soil	Soil is a mixture of minerals and organic material that covers much of Earth's surface.
Reproduction	Plant reproduction is the creation of new plants by one or more parent plants.
Seed	Seeds are the small parts produced by plants from which new plants grow.
Dispersal	Dispersal is the means by which a plant ensures its seeds are spread as far as possible from the parent plant, to give the seeds the best chance of germination.
Pollination	Pollination is the process that allows plants to reproduce.
Fertilisation	Pollen reaches the new flower and travels to the ovary where it fertilises egg cells (ovules) to make seeds. This is fertilisation.
Absorb	To take in or suck or swallow up.
Nutrients	These substances are needed by living things to grow and survive. Plants get nutrients from the soil and also make their own food in their leaves.
transportation	Transportation is the process that involves the movement of water and necessary nutrients to all parts of the plant for its survival.

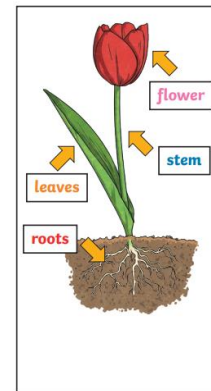
Key Knowledge

What Does a Plant Need to Grow?

water light nutrients from the soil air room to grow

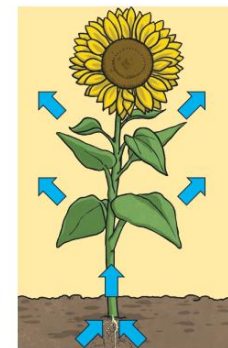
Different plants vary in how much of these things they need. For example, cacti can survive in areas with little water, whereas water lilies need to live in water.

Images and Diagrams

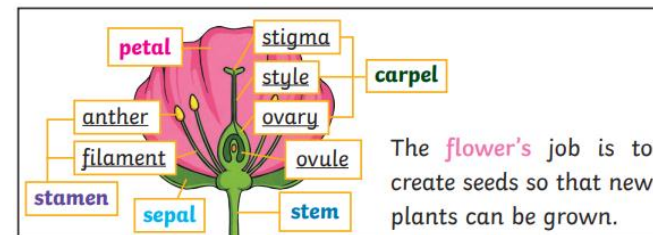


How Water Moves through a Plant

1. The **roots** absorb water from the soil.
2. The **stem** transports water to the **leaves**.
3. Water **evaporates** from the **leaves**.
4. This **evaporation** causes more water to be sucked up the **stem**.



The water is sucked up the **stem** like water being sucked up through a straw.



The **flower's** job is to create seeds so that new plants can be grown.



OUR DRIVERS:

Spiritual, Moral, Diversity & Beliefs

Communities & Environment

Life Skills

Personal, Social & Emotional Well Being



English

Launch Text: The Promise by Nicola Davies

Writing

To know how to write a sequel to The Promise. To know how to write a science explanation text on how to care for plants. To know how to write a persuasive letter to care for the environment. To know how to describe emotions. To know how to use a/an appropriately. To know how to use the perfect present tense. To know how to use speech marks.

Spelling

To know how to spell: homophones, words with prefix 'bi' and 're', /g/ spelt 'gue' and /k/ spelt 'que' and /sh/ spelt 'ch'.

Reading

To know how to infer character's feelings, thoughts and motives and justify using evidence from the text.

To know how to answer comprehension questions using a range of texts.

Maths

Multiplication and Division:

To know how to multiply and divide a 2-digit number by a 1-digit number and link multiplication and division.

Length and Perimeter:

To know how to measure in mm, cm and m. To know how to add and subtract length. To know how to measure perimeter.

Fractions:

To know about the denominator of unit fractions. To compare and order unit and non-unit fractions. To know about the numerator of non-unit fractions. To know how to place fractions on a number line and count in fractions on a number line.

Bluebell Class – Spring Term 2

What do plants need to thrive?



Trip:

The Living Rainforest - £20 (approx.)

Physical Education

Personal improvement – circuit training

To know how to identify some muscle groups used in gymnastic activities. To know how to explain what they need to do to get ready to play games. To know how to carry out warm ups with care and an awareness of what is happening to their bodies. To know when their heart rate, temperature and breathing rate has changed.

Net/wall games – tennis

To know the point of the game. To know how to keep rules effectively and fairly. To know how to keep up a continuous game, using a range of throwing and catching skills and techniques. To know how to use a small range of basic racket skills.

Computing

Email

I know how to use email such as 2Email to respond to others appropriately and attach files.

Branching Databases

I know how to collect data and input it into software. I know how to analyse data using features within software to help such as, formula in 2Calculate (spreadsheets).

Music

Charanga – The Dragon Song

To know about music from around the world, celebrating our differences and being kind to one another.

Personal, Social and Health Education

Jigsaw Piece – Healthy Me

To know how exercise affects their bodies. To know why their hearts and lungs are such important organs. To know that the amount of calories, fat and sugar that they put into their bodies will affect their health. To know that there are different types of drugs. To know that there are things, places and people that can be dangerous. To know a range of strategies to keep themselves safe. To know when something feels safe or unsafe. To know that their bodies are complex and need taking care of.

Science

Plants

To know how to identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. To 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. To know how to investigate the way in which water is transported within plants. To explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

Animals, including humans and nutrition (DT link)

To know that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. To know that humans and some other animals have skeletons and muscles for support, protection and movement.

DT

To know how seasonal fruits in Britain are grown and processed. To know why vegetables form an important part of a healthy and varied diet. To show what you have learned about eating seasonal food as part of a healthy, varied diet. To explore and evaluate a range of existing products To use your knowledge the basic principles of a healthy and varied diet to prepare dishes. To know the different food groups and name food from each food group. To know that food has to be grown, farmed or caught in the UK, Europe and the wider world. To a wider variety of ingredients and techniques to prepare and combine ingredients safely.

French

Family and Friends

To know how to identify and introduce some of their relations. To know how to name some common pets. To know how to name some rooms in their home. To know whether nouns are masculine or feminine. To know how make new sentences by substituting other vocabulary appropriately.

Religious Education

Does Easter make sense without Passover?

To know how to explore the connections between Passover and Easter, particularly the Last Supper