Enriching lives every day; enabling our school community to learn, achieve and flourish through living 'life in all its fullness'

Sustainability

Subject: Science

Year group: 3

Term: Summer

Unit name: Plants

Strand: Biology

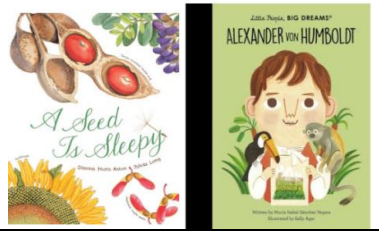
Prior Knowledge - Which things are living and which are not. A variety of common wild and garden plants, including deciduous and evergreen trees and how to identify them. The structure of common flowering plants, including trees (including leaves, flowers, fruits, roots, bulbs, seeds, stem, trunks and branches). Seeds and bulbs grow into mature plants. Plants need water, light and a suitable temperature to grow and stay healthy. Different vegetation belts and climate zones around the world. Plants and animals depend on each other to survive.

Key Vocabulary: Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal- wind dispersal, animal dispersal, water dispersal, pollen, roots, stem, trunk, leaves, absorb, nutrients, reproduce, germination, stamen, style.

Key Scientists:

Charlie Dimmock | Carl Linnaeus | George Washington Carver | Alexander Humboldt | Oliver Rackham

Suggested books:



National curriculum:

- I can identify and describe the functions of different parts of a flowering plant.
- I can explore the requirements of plant life and growth.
- I can investigate the way in which water is transported within plants
- I can explore the part that flowers play in the lifecycle of flowering plants including pollination, seed formation and seed dispersal

Working Scientifically:

- Asking relevant questions and using different types of scientific enquiry to answer them.
- Setting up simple practical enquiries, comparative, and fair tests.
- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Gathering, recording, classifying, and presenting data in a variety of ways to help in answering questions.
- Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.
- Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Using results to draw simple conclusions, make predictions for new values, suggest improvements, and raise further questions.
- Identify differences, similarities or changes related to simple scientific ideas and processes.
- Use straightforward scientific evidence to answer questions or to support their findings.

C	H
Compassion	Hope
When Jesus arrived, he saw a large crowd. He felt sorry for them and healed those who were sick. Matthew 14:14	I say this because I know what I have planned for you," says the Lord. "I have good plans for you. I don't plan to hurt you. I plan to give you hope and a good future. Jeremiah 29:11

Enriching lives every day; enabling our school community to learn, achieve and flourish through living 'life in all its fullness'

Key learning objectives		
Knowledge	**Working Scientifically**	**Scientific Enquiry**
To identify and describe the functions of different parts of a flowering plant.	To record my findings using labelled scientific diagrams.	To identify the parts of plant.
To explore the requirements of plant life and growth.	To plan a comparative test	To carry out a comparative test.
To investigate the way in which water is transported within plants	To interpret my findings using scientific knowledge.	To make observations over time.
To explore the part that flowers play in the lifecycle of flowering plants including pollination, seed formation and seed dispersal.	To explain in detail what pollination is.	To use research and my own scientific knowledge to explain the process.
To explore the part that flowers play in the lifecycle of flowering plants including pollination, seed formation and seed dispersal.	To evaluate my seed spinner.	To look for patterns.
To explore the part that flowers play in the lifecycle of flowering plants including pollination, seed formation and seed dispersal.	To look carefully at seeds.	To identify and classify different seeds.

Scientific Enquiry Key

Comparative / fair testing
Changing one variable to see its effect on another, whilst keeping all others the same.

Pattern-seeking
Identifying patterns and looking for relationships in enquiries where variables are difficult to control.

Research
Using secondary sources of information to answer scientific questions.

Identifying, grouping and classifying
Making observations to name, sort and organise items.

Observation over time
Observing changes that occur over a period of time ranging from minutes to months.

Problem-solving
Applying prior scientific knowledge to find answers to problems.

Assessment- Key indicators:

- Can explain the function of the parts of a flowering plant.
- Can describe the life cycle of flowering plants, including pollination, seed formation, seed dispersal and germination.
- Can give different methods of pollination and seed dispersal, including examples.
- Can explain observations made during investigations.
- Can look at features of seeds to decide on method of dispersal.