**Plants** 

# Science Knowledge organiser

Learning lens: Biology

Class: Year 1

### **Previous Knowledge**

Plants grow and some have flowers. Some trees lose their leaves in the autumn and winter

#### **Project Hook or 'Wow' memory**

Planting our own seeds and watching them grow- how does a sunflower change each week?

Learning Steps	Key Knowledge (answers)
What are wild plants and where can we find them? (Identify and classify)	A wild plant seed grows where it falls. It doesn't need to be planted or cared for as it grows. If it grows somewhere unwanted it may be a weed. The following are all wild plants; dandelion, daisy, buttercup, nettle, ivy, clover, brambles.
What are garden plants? (Identifying and classifying)	People may grow plants in their gardens and care for them. They may grow flowering plants which are beautiful to look at or grow plants for food. When plants are grown for food this may be called a herb garden of a vegetable patch. Some common garden plants are; fuchsia, pansy, sweet pea, sunflower, rose, lavender iris.
What are the different parts of a plant and what are their uses? (Observation and reporting findings )	Parts of a plant– Flower- these are usually brightly coloured and attracted insects and birds Seeds– seeds grow into new plants Leaf– catches sunlight to make energy Stem– this holds the plant up and carries the water and nutrients from the roots to the leaves and flowers Roots—roots take in water and nutrients from the soil
What is the difference between a deciduous and evergreen trees (Identifying and classify- ing)	Deciduous trees lose their leaves in the autumn every year. Their leaves are generally broad, flat and have veins running through them.  Evergreen trees have green leaves all year round. Their leaves are general thick, waxy and narrow like needles.
What are the different parts of a tree and what are their uses? (Observation)	Leaves— Catch the sunlight to make energy Branches— The branches hold all of the fruit and leaves and take water and nutrients to them. Trunk - bark covers the trunk to protect it, this helps the tree stand up tall. Roots— These help anchor the tree and the roots take in water and nutrients. Fruit—E.g. Apples/ pears— not all trees produce fruit. Evergreen trees will produce seeds.
How long does it take for a sunflower to grow? (Observation over time)	Start– seed, 3 days—the roots will develop, 1 week a shoot will start to appear, 6 weeks a stem will be developed and the plant will start to grow leaves. 10 week s the Sunflower head will be fully developed.

## The key skills we want pupils to use during this topic:

Identify and classify - different common wild and garden plants including deciduous us and evergreen trees.

**Observation over time**— keeping records of how plants have changed over time. Using magnifying glasses and comparing and contrasting familiar plants.

Report findings—drawing diagrams showing the different parts of plants and trees

Pattern seeking-compare and contrast what they have found out about different plants.

Gather, record, sort and present data in a variety of ways to help in answering questions.

Key vocabulary	
Deciduous	A tree that loses its leaves each year during the autumn
Evergreen	A tree that keeps its green leaves all year round, even in the winter.
Root	Roots take in water and nutrients from the soil
Stem	Stem holds the plant up and carries the water and nutrients from the roots to the leaves and flowers
Leaves	Catch sunlight to make energy
Flowers	Flowers attract insects and birds
Petals	Petals are the colourful part of the flower
Fruit	Fruit contains the plants seeds
Seed	Seeds grow into new plants
Bulb	Grow into new plants

#### **Statutory Requirements**

Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees

Identify and describe the basic structure of a variety of common flowering plants, including trees.

