

Science

All children – regardless of gender, starting point or background – will have the opportunity to engage with a high-quality science education. They will be equipped with the knowledge, skills and vocabulary to understand how science can be used to explain what is occurring, predict how things will behave and analyse caused. We intend to inspire a sense of enjoyment and curiosity about science.

Plants

Summer 1 & 2

Igniting Prior Knowledge:

Year R (*Understanding the World: The Natural World*)

- Growth (Life Cycles) and Caring for Living Things
- Plants grow from seeds or bulbs.
- Plants need water to help them grow.
- Plants grow from the seed, get bigger and then drop their own seeds. Then a new plant grows. This is the life cycle of the plant.

Key Vocabulary:

- Fruit
- Root
- Trunk
- Branch
- Stem
- Wild
- Garden
- Deciduous
- Evergreen



New Knowledge:

- A wild plant is a plant that hasn't been grown by people e.g. buttercup, dandelion and daisy.
- Some plants are planted by people in their gardens.
- Some trees keep their leaves all year (evergreen) e.g. conifer.
- Some trees drop their leaves during the autumn and grow them again in the spring (deciduous) e.g. apple tree, beech, horse chestnut.
- A flowering plant has roots, stem, leaves, seeds and a flower (petals).
- Flowering trees have roots, trunk (stem), branches, leaves, blossom, fruit and seeds.



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Seasonal Changes

Autumn, Spring & Summer

Igniting Prior Knowledge:

Year R (Understanding the World: The Natural World)

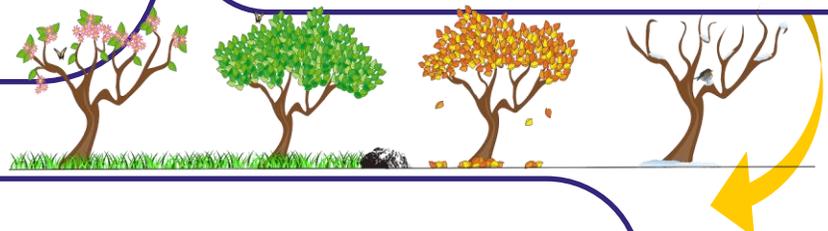
- ☐ The environment is everything around me.
- ☐ The environment can change.
- ☐ In winter, the weather gets colder. It may snow and we see lots of ice and frost. Lots of trees don't have leaves on them.
- ☐ In Autumn, the weather starts to get colder again, and we see more rain and wind. Leaves start to turn brown, red and yellow and fall off some trees.

Year R (Melting and Freezing)

- ☐ Ice is frozen water
- ☐ Ice is hard
- ☐ Water freezes when it is very cold
- ☐ Ice melts when it gets warm

Key Vocabulary:

Seasons	Deciduous
Sunny	Evergreen
Rain	
Windy	
Snow	
Temperature	
Day length	
Nuts	
Berries	



New Knowledge:

- ☐ In the UK there are four seasons: Spring, Summer, Autumn and Winter.
- ☐ This term, it is Autumn then Winter.
- ☐ In Autumn, on some trees, the leaves will change colour and then fall off the tree
- ☐ Some plants will produce seeds, nuts or berries e.g. horse chestnut (conkers), pinecones, acorns, blackberries, apples.
- ☐ In winter, some trees are bare (have no leaves) and some trees/bushes are still green.
- ☐ The change in weather causes many other changes. Some examples are the types of animals found outside, seed and plant growth, leaves on trees, and where animals and plants live.
- ☐ In the UK, during autumn and winter, daylight length gets shorter each day (it gets light later in the morning and dark earlier).
- ☐ There are lots of different types of weather: rain, sun, cloud, wind, snow, sleet, hail etc
- ☐ Weather changes with the seasons - Autumn (colder, rain, sunny, windy) Winter (cold, sunny, rain/hail, snow/sleet, frost, fog)
- ☐ In the UK, it is usually colder and rainier in winter

