**Year 3 and 4 Science: Plants (Summer 1)**

**Enquiry questions: What functions do different parts (roots, stem, trunk, leaves, flowers) of flowering plants play?**

*(****For parents:*** *Children need to know that roots anchor a plant in place; roots absorb water and nutrients from the soil; the stem/trunk transports water and nutrients around the plant and holds the leaves/flowers up in the air; leaves use sunlight and water to produce the plant’s food; a flower is the part of the plant which is often brightly coloured and grows at the end of a stem.)*

**Task 1:** Complete the ‘flowering plants ID card’ in your garden or whilst out on a walk (ensuring that you adhere to government guidance on going out).

Are there any flowering plants you can spot that are not on the list?

Scavenge for plant parts that are on the floor. Sort the parts in different ways.

**Useful tips:** you could sort the leaves in one pile and the seeds, berries and fruits in another pile (berries are a type of fruit); you could put the fruits and berries together as they both contain seeds; you could sort based on how they look; you could sort based on how they feel.

As the children sort plant parts, discuss the function of the root, stem, trunk, leaves, flowers.

**Enquiry questions: How is water transported within plants?**

*(****For parents:*** *Children need to know that a stem/trunk transports water and nutrients around the plant. It also holds the leaves/flowers up in the air.)*

**Task 2:** Set up a glass of water with food dye. Use white carnations or other white flowers. Observe the flowers around 2, 4, 24, and 48 hours after you put them in the dyed water. Be sure to also observe their stems, especially the bumps where the leaves branch from the stem and it is lighter green (it may be easier to see the dye here). If you have a camera, you can use it to take a picture of the flowers at these time points. Make notes of what you observe. Choose how you present what you have found.

**Useful tips:** You can show this action by dipping a corner of a paper towel into a pool of coloured water. The water clings and ‘climbs up’ the paper towel in the same way.

**Enquiry question: What is a botanical art and why is it important?**

*(****For parents:*** *Use these last two tasks to reinforce the learning from task 1 and 2.)*

**Task 3:** Explore Botanical art: <https://www.botanicalartandartists.com/what-is-botanical-art.html>

Create a poster about the why botanical art is so important and how art is linked to science.

**Task 4:** Children to create their own botanical art based on either: a selection of flowers from their ‘flowering plants ID card’ or from plants in their garden/they have found on their walk.

Children can also complete ‘activity sheet roll and draw plant game’ and ‘activity sheet the life cycle of flowering plants.’