Plant Lifecycles – self-guided tour

Walk to the big stone arch, and then turn left down the path into the Garden.

1  **Parts of a plant**  (5 minutes)

Choose a nearby plant to examine more closely as a group. Can you identify all the different parts that you can see? Which parts of the plant can’t you see (e.g. roots, fruit, seed)? Why can’t you see them? What is the job of each of the different parts?

2  **Bee a pollinator**  (5 minutes)

Imagine you are a bee, exploring the garden. Which plants would you want to visit? Why? Take a closer look at their flowers. Pollinators are attracted to lovely smells, bright colours and tasty nectar.

Find the jasmine (*Jasminum officinale*) plant nearby (2 on the map). It’s not yet in flower, but have a whiff of the sniffing pots you have been given to find out what its flowers smell like. Pollinators aren’t the only creatures to enjoy these flowers, humans do too: over 80 % of women’s perfumes and over 30 % of men’s aftershaves contain jasmine essential oil!

3  **Types of pollinator**  (5 minutes)

Some bees have short tongues, and some bees have long-tongues. The length of a bee’s tongue can determine which flowers it visits and pollinates. Look at the foxgloves (*Digitalis purpurea*) in the medicinal beds (3 on the map); these can only be pollinated by long-tongued bumblebees. Why do you think this is?

Bees aren’t the only pollinators. Flies, beetles, butterflies and even wasps also help pollinate our flowers!

[http://newingtongreen.org.uk](http://newingtongreen.org.uk)
4 **Wind pollinated plants** (5 minutes)

Some plants rely on the wind to move their pollen around from flower to flower. Therefore they have no need to attract pollinators. This is why they don’t waste energy producing colourful flowers or tasty nectar.

Take a look at the grasses nearby (4 on the map). Can you see their flowers? How would you describe them? If you look closely you may be able to spot their stamens, and see how the anthers hang outside the flower, so the pollen can be blown away in the wind. We know that grass pollen is easily carried by the wind, as it is a common cause of hay fever at this time of year!

5 **Looking after pollinators** (5 minutes)

Our pollinators do such an important job, that we must look after them. They need plenty of nectar to give them energy, but also need safe places to nest.

Can you spot the bee homes we have on the wall nearby (5 on the map)? These are for red mason bees, which are excellent pollinators of strawberries, raspberries and fruit trees.

Make your way back to the Conservatory, where we started.

6 **Seed dispersal sorting game (Conservatory)** (10 minutes)

As a group, take a look at the seeds you have been given, and decide how each is dispersed, by matching them with the labels provided:

- Wind (parachutes)
- Animal (fur)
- Water
- Explosion
- Fire

Can you think of any seeds that use any other ways to disperse their seeds?

Wind (spinning), animal (eating), animal (collecting), shaking