## Start at Victoria Gate

As you exit the ticket barriers, turn right and make your way towards the Palm House. At the corner, stop and smell the air — what's that beautiful scent? Follow your nose and walk to the left of the Palm House until you reach our stunning Rose Garden just behind it.

- 1 The Rose Garden was planted in the 1920s and is home to 170 species. Roses release their glorious scents when they are ready to be pollinated, attracting bees, flies, beetles and butterflies and us humans!
- ★ How many different colours can you find? Now use your nose to smell the different varieties.
- ★ Can you describe the different scents? Challenge yourself to find the rose with the strongest scent.

Tick the box when you have completed this section of the trail

→Turn over to find out more about how we use roses.

Walk through the Rose Garden to the other side of the Palm House and keep going past the Waterlily House until you come to a circular flowerbed. Turn left here and you'll find yourself at the bottom end of The Broad Walk.

- 2 The Great Broad Walk Borders contain 30,000 plants and, at 320 metres, are the longest double herbaceous borders in the UK. The southerly end, where you're standing, is more shady, while the other end is in full sun.
- ★ Compare each side can you see how the planting is symmetrical?
- ★ How many different plants can you count in one section?

→ Turn over to explore how plants have adapted to cope with their environment.

Don't leave The Broad Walk just yet. We have another challenge for you here.

- 3 Bees are some of the most important pollinators on the planet. They help many useful plants reproduce. Bees like flowers with wide-open petals so they can land easily and they especially love purple flowers.
- \* Have a look at some purple flowers. How many bees can you see?
- \* Can you find a daisy? How many different pollinators can you spot on these large white and yellow flowers?
- ★ Look closely at the bees careful not to disturb them! Can you see any bright yellow pollen sacs on their hind legs?

Turn over to do some bee spotting.

At the northern end of The Broad Walk, turn right and walk across the front of the Orangery. As you do, look to your right to spot our Wollemi pine on the other side of the picnic tables.

- 4 The Wollemi pine dates back to the time of the dinosaurs. It has adapted to its environment to help it survive.
- ★ Feel its needle-like leaves. Now carefully touch its rough trunk. Why do you think it has developed leaves and a trunk like this?
- \* Have a look for its pine cones. It has more rounded female cones higher up the tree and narrower male cones further down.

  Its seeds are paper thin, winged and brown.

Turn over to find out more about what makes the Wollemi pine so special.

Continue walking straight on past the Wollemi pine, and you will find yourself at a crossroads. Walk straight across and keep going until you reach the stone pine. Opposite this pine there is a turning — enter this shady, bamboo-lined pathway.

- 5 Now you will find yourself in the secretive Secluded Garden, surrounded by bamboo. It might look like a tree, but bamboo is actually a giant grass. It's the quickest growing land plant in the world! Some species can grow one metre in 24 hours.
- ★ Do you feel cooler here?
- ★ Kew used to provide bamboo to London Zoo.

  Which animal's dinner do you think it was for?

Turn over to find out more about the uses of bamboo.

At the end of the bamboo pathway, turn right and go over the wooden bridge. You will see a high circular hedge. Turn left and sit in the middle. If the bridge is closed, follow the hedge around and enter in the opposite way.

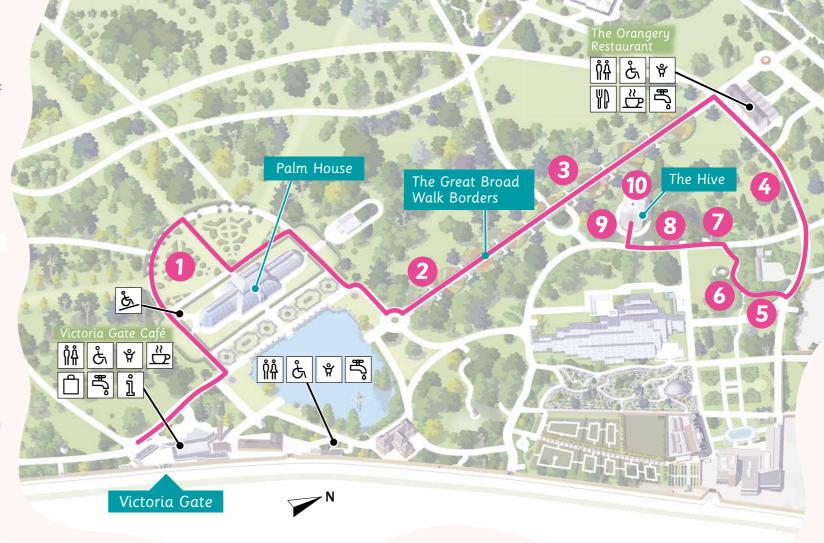
- 6 In the middle of this enclosure you'll see a spiralled water feature made of slate. Slate is a type of rock formed deep inside the Earth.
- ★ Have a look at the shapes this sculpture creates. Does it remind you of anything you have seen at Kew today?

← Turn over to find more ways to enjoy this secret place.

Leave by the exit furthest from the wooden bridge. Look to your right and you will see a very tall tree. Make your way over to it.

- 7 This is one of the oldest trees in Kew Gardens.
  Native to China, our Ginkgo biloba was planted in 1762 when the Gardens were first being designed by Princess Augusta, the mother of George III. This one is a mere baby though the oldest recorded ginkgo is 3,500 years old!
- \* Examine its unique fan-shaped leaves. Touch its deeply cracked brown bark.
- ★ Pay attention to its trunk. Hang on! Is this one tree or two?

Turn over to find out what's going on with this tree's trunk!





Next to the ginkgo you will find another of our oldest plants. Step inside the wisteria cage.

- 8 This wisteria was planted in 1761. Look at its twisting branches it has climbed high by supporting itself on the frame beneath it.
- ★ There is an animal living here. Can you find the evidence? What animal is it?

→Turn over to get creative.

Exit the wisteria cage and turn right. Continue down the path until you reach The Hive. Here, you'll find yourself in a wildflower meadow surrounding the base of the installation.

Wildflower meadows are the rarest habitats in the UK. Since the 1930s, we have lost 97 per cent of them. It's very important that we protect these landscapes, as they are vital for pollinators. They provide shelter and food for insects as well as birds, hedgehogs, bats and field mice.

- ★ Look at the diversity of plants here.
- ★ How many can you count? The more different species of plant there are, the more pollinators they will attract.

← Turn over to find out more about pollinators.

Climb up to the top of The Hive.

- Welcome to The Hive! Here you are connected to real honeybees in a beehive at Kew. A sensor picks up vibrations from the movement of the bees and sends them in real time to The Hive. The lights flicker in response to those vibrations, and the sounds you are hearing are triggered by different bee activities.
- \* Stop and listen. Can you hear the different layers of activity in the music?
- \* Watch the lights. How busy are our Kew bees today?

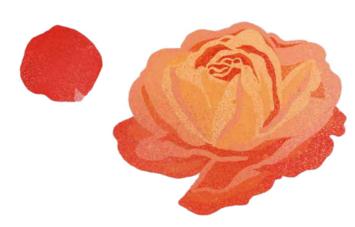
Turn over to find out more about bees and how they love to dance.

## More activities...

Roses have been used by people since ancient times. The Greeks and Romans used them to scent rooms and even perfumed their fountains with rose water. In more recent times, they have been used for medicines. Rose oil is said to be good for easing pain and decreasing anxiety. It has also long been used in perfume making.

Did you know it takes 242,000 rose petals to make 5 ml of rose oil?

- \* Squash a fallen petal between your fingers. Can you see the oil?
- ★ Which of our roses do you think would make the best perfume?



- Plants adapt to survive in the environment that they live in. Plants that grow in shady spots have broad, thin leaves and non-showy flowers. They also have more chlorophyll, the green pigment that helps them absorb energy from light. Plants that are sun-loving have smaller, thicker leaves and bigger flowers.
- \* As you walk down The Broad Walk, examine the different plants and observe their features.
- ★ See how they change as you walk from one end to the other.
- There are more than 250 species of bee in the UK. Have a look at these common Kew bees and see if you can identify them among the Great Broad Walk Borders.





carder bee





Garden humhlehee





The remarkable Wollemi pine was actually thought to have been extinct for two million years until a small group of them was found in 1994.

★ Can you use the interpretation board to discover who found them and where?

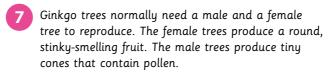
We are still discovering new plants even now. In 2020, 156 plant and fungi species were discovered that are new to science! It's important that we protect all species, as we're still learning about the power of plants and how they might help humanity, now and in the future.



- Bamboo has many uses. It can be used to make furniture, fabric, musical instruments and paper. We can even eat the shoots. As strong as steel, earthquakeresistant and able to withstand temperatures of 4,000°C, it makes an excellent building material.
- ★ Have a close look at the structure of the plant. What do you think are its most useful features?
- ★ What could each part be used for?

It has long been understood that there is a connection between the enjoyment of nature and a feeling of calm. Have a moment of mindfulness in this peaceful spot. Sit down and rest. Close your eyes.

- ★ What do you feel?
- \* What can you hear?
- \* Listen to the gurgle of the water and the rustle of the leaves in the breeze.

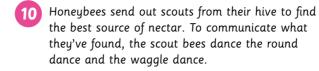


This particular ginkgo is unique – a female tree was grafted on to a male tree, meaning it can reproduce on its own. Our horticulturists collect the seeds every year and use them to grow seedlings for grafting.

- ★ Look closely can you work out which part of the tree is male and which is female?
- \* Which is the trunk that was grafted onto?



- What a magical space this is. If only plants could talk, what would they tell us? Sit for a while and think about the history this wisteria has lived through.
- \* Make up a poem or story together using your day at Kew as your inspiration.
- Birds, bats and small mammals can help with pollination, but the main bulk of the job is carried out by bees, butterflies, moths, beetles, wasps and flies. There are 70 species of butterfly in the UK.
- \* Have a good look around the wildflower meadow underneath and up the sides of The Hive.
- \* How many different species of butterfly can
- \* Visit growwilduk.com to learn more about the importance of wildflowers and what you can do to help.



The round dance signals that there is a good pollen area nearby. The waggle dance tells their hive mates exactly where the pollen area is, how far to go and in what direction they need to fly.

\* Pretend you are a bee and do a round dance and a waggle dance in time to the captivating music in The Hive.



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