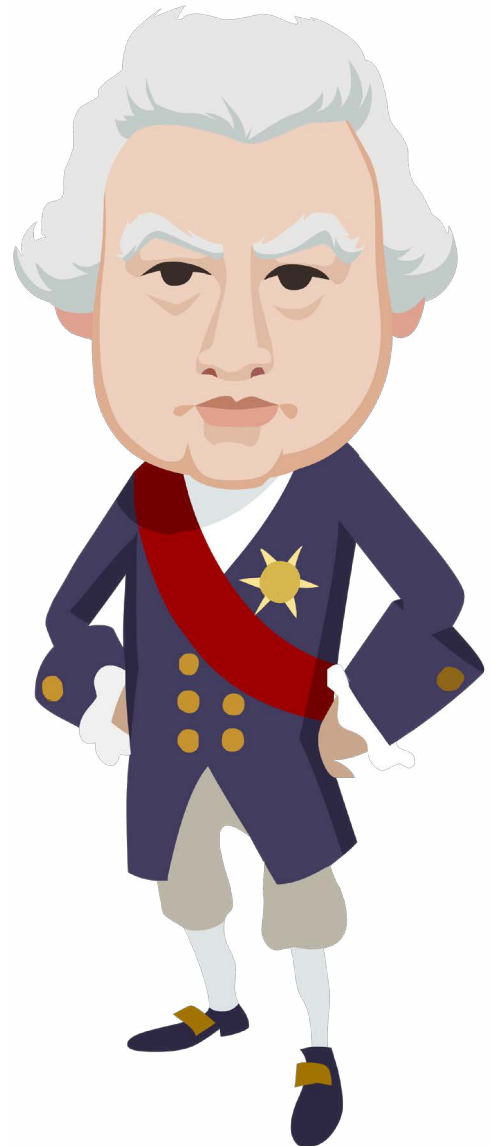
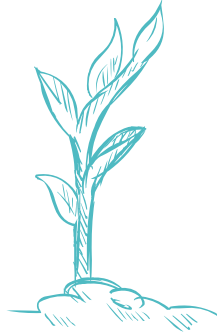


# Joseph Banks

1743 – 1820

## An amazing story about plant life



### What would Joseph Banks tell us if we could travel through time and ask him about his travels and plant life discoveries?

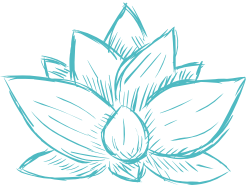
Ever since I was a boy, I had always loved the natural world. I was fascinated by the trees, flowers and plants that grew on my father's estate in Lincolnshire, England. From a young age, I had a thirst for knowledge about the natural world around me and would go on to dedicate my life to botany, the study of plants.

After completing studies in botany at the University of Oxford, I went on to work with other botanists at the Chelsea Physic Garden in London, which was full of amazing plants that could be used for medicine. My work there led me to become an advisor to King George III, who I encouraged to support voyages around the world. I knew that travel would be important in the discovery of new plants and was determined to go out and make some of these discoveries myself.

My first expedition was to Eastern Canada in 1766. It was a cold and windy place but the harsh conditions were perfect to discover plants untouched by people. My fellow scientist

Carl Linnaeus had recently come up with a new system for classifying, or grouping, plants and animals in an ordered way. His system placed living things in different groups based on their physical features. Each species was also given a unique scientific name in Latin so that scientists would know exactly which species of plant or animal was being talked about. I used this new system to describe and name the plants I came across on my trip.

A few years later, I was delighted to be able to join a voyage of discovery to the Pacific Ocean aboard the HMS Endeavour. It was led by Captain James Cook, who would go on to become one of the world's most famous explorers. He had been given a secret mission to search for the continent now known as Australasia, the unknown land of the south. My team set off in search of new species of trees, shrubs and plants. I knew how important this mission was and spent a great deal of my own money on equipment so that we could collect, record and preserve examples of plants that we found.



It was a dangerous and scary journey but we witnessed some incredible sights on the way. When we arrived in Tahiti, we discovered an amazing place full of plants and animals that could not be found in Europe. We sailed on to New Zealand, where we were able to make yet more new discoveries. We continued westward, until one day the lookout shouted, 'Land ahead!'. We had found Australia!

We dropped anchor in a beautiful place that became known as Botany Bay because of the huge number of plants that we discovered there. We quickly collected hundreds of plants that had to be drawn and described as accurately as possible as not all of them would survive the journey home. Many of these plants are in use today. For example, the oil and dried leaves of the eucalyptus tree are used to treat cold symptoms.

Alarmingly, before we could leave, the Endeavour struck the Barrier Reef and almost sank! However, while repairs were underway, I had the opportunity to spend more time studying the plants of the area. Exploring the coastline further, I discovered a lot of different plant species that shared some common features. This group of species was later named '*Banksia*' after me. These plants produce a lot of nectar, which provides an important food source for all sorts of animals

in the Australian bush. They are also naturally adapted to outbreaks of fire – many have thick fire-resistant bark or can re-sprout after burning, whilst others may die in the fire but release their seeds, which actually use the heat to start growing new plants. Over our three-year voyage, we collected over 3,000 examples of plants from over 1,000 new species, including the *Banksia* plants. It was such an exciting time for plant science!

Back home my work had sparked a lot of interest. Everyone wanted to talk to me about our trip and the discoveries we had made. However, I stayed focused on science and helped to make the King's Royal Gardens at Kew, London, one of the world's leading botanical gardens. As the King's botany advisor, I had a lot of influence, and was able to continue building new plant collections throughout my time there.

My life gave me great opportunities to explore the world, discover all sorts of plant life and raise people's awareness and knowledge of the natural world. My achievements led to royal honours, as well as becoming president of the Royal Society, one of the world's leading scientific societies, a position I held for 41 years.

## Glossary

**Botany** – the scientific study of plants.

**Botanical garden** – a garden dedicated to the collection and study of a wide variety of plants.

**The Royal Society** – a scientific society founded in 1660 to promote science and its benefits.

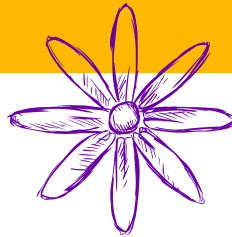
**Classification** – the grouping and naming of animals and plants based on their physical characteristics.

**Species** – a group made up of one kind of plant or animal, based on shared physical features.



## Timeline

1743	Born in London to a wealthy family
1766	Elected to The Royal Society at the young age of 23
1766	Set off on an expedition to eastern Canada
1768-1771	Joined Captain Cook on the HMS Endeavour voyage, visiting Tahiti, New Zealand and Australia
1770	Discovered the <i>Banksia</i> group of plant species while in Australia
1778	Became President of the Royal Society
1781	Made a baronet by King George III
1820	Died in London



## Exercises

- Before his later work at the Royal Botanical Gardens in Kew, Joseph Banks helped to develop the Chelsea Physic Gardens. A physic garden is a type of herb garden made up of medicinal plants. Can you research and design a physic garden with different plants that are good for us?
- During his natural history voyages, Joseph Banks had to describe new trees and plants. Can you make a tree file? Find a tree you like and describe it in as much detail as you can. Use words and drawings or photos.
- Joseph Banks discovered *Banksia*, which is a group of around 170 species of plant. *Banksia* species are heavy producers of nectar, which is essential in the food chain of the Australian bush. Can you find out some of the animals that feed on this nectar?
- Animal and plant species each have a common name and a scientific name. Choose a specific tree and try to find out both its common name and scientific name in Latin. What features are common to this type of tree?

