

# Royal Botanic Gardens Formal Learning, Kew 2019 **Mobile Museum:** Teachers' lesson plans – Overview **Key Stage: 1 & 2**



## **Overview of the project**

The Mobile Museum Schools project was developed to support teachers and pupils in creating their own museum using plant-based objects, and to increase awareness of the importance of plants in our everyday lives. A whole-school approach was adopted to encourage learning about why plants matter, and to engage parents, carers and the wider community.

This project was part of a wider three-year Mobile Museum research project which explored the movement of objects in and out of the Economic Botany Collection at Kew since its creation over 150 years ago. Royal Holloway, University of London and Kew have been investigating how and why plant-based objects from Kew were sent to 400 museums worldwide and 700 schools across the UK during the nineteenth and twentieth centuries.

Two London Primary Schools – Wilberforce Primary School, Westminster and St Monica's Primary School, Hackney – worked in partnership with Kew and Royal Holloway to explore object-based learning about plants. The schools took part in a wide range of workshops delivered by Kew's Formal Learning and Economic Botany teams. These sessions included interactive teacher training, visits to Kew's Economic Botany Collection, and outreach school-based workshops. The workshops included object handling, developing enquiry skills and the importance of plants, as well as how to develop and curate the schools' chosen objects for their museum.

Pupils and teachers sourced plant-based objects from their families and local community to create their museum. The project provided a rich learning resource using plant-based objects to understand the importance of plants and share their history and cultural significance.

This resource was produced by the Mobile Museum Project, a collaboration between the Royal Botanic Gardens, Kew and Royal Holloway, University of London, supported by the Arts and Humanities Research Council.

https://royalholloway.ac.uk/research-and-teaching/departments-and-schools/geography/research/explore-our-research/the-mobile-museum-economic-botany-in-circulation/schools/

https://www.kew.org/science/our-science/departments/collections-department/economic-botany-collection







## **Teacher Lesson Plans: An outline**

The Kew Formal Learning team has designed a series of Key Stages 1 and 2 lesson plans to support teachers in the development of their plant-based museums. Each plan provides suggested activities, links to the National Curriculum, key vocabulary, introductory and extension activities.

We recommend that teachers download and read our **Curating a School Museum Teacher Handbook** 

https://intranet.royalholloway.ac.uk/geography/documents/pdf/mobile-museum/curating-a-school-museum-2.pdf

which provides a short history of school museums as well as hints and tips on how to select, curate, interpret and display your plant-based objects.

The three lesson plans are designed to be used in sequence by Key Stage 1 and 2 teachers. They can be adapted and developed as required.

- · Lesson 1: Object handling
- · Lesson 2: Why plants matter
- · Lesson 3: What's your story? Creating your museum

The lesson plans and the **Curating a School Museum Teacher Handbook** are designed to enrich and support cross-curricular learning in:

- · Science
- · Geography
- · English
- PSHE
- · Art and Design
- · Design and Technology



## **Create your own museum**

Why not create your own twenty-first century School Museum? Our **Curating a School Museum Teacher Handbook** provides Key Stage 1 and 2 teachers with a range of useful tips and cost-effective ideas.

Creating your own plant-based museum provides a stimulating and cross-curricular approach to learning. It will not only be a creative process, but it will engage your staff and pupils as well as their families and the wider community. The museum may also serve as a resource to help pupils explore topical global issues and themes such as climate change and tackling world hunger.

### **Learning outcomes**

#### Pupils will:

- · develop their research enquiry skills
- · develop their identifying and classifying enquiry skills
- · participate in debate and discussion
- · understand the importance of plants and how they are used
- · understand the characteristics of the plants and plant-based objects studied
- recognise that there is a great variety of living things
- explain the importance of classification
- give reasons for classifying plants based on certain characteristics
- · understand the reasons why some plants are under threat or endangered
- · use this knowledge to create their own museum display



# Lesson plan 1: Object handling

Pupils will develop their enquiry skills through careful observation and handling of plant-based objects. Collect a variety of approximately 15–20 familiar and unfamiliar objects. These could include plant-based foods, spices, household objects, ornaments, musical instruments, clothing and materials, such as raffia, wood, cane or bamboo. The objects can easily be bought from local shops or markets as well as being collected, with permission, by the pupils themselves from their homes or community groups.

NOTE: When selecting objects be careful to check for any pupil allergies.

Session duration: 60 minutes

#### **Curriculum links:**

- · KS 1 and 2 Science
- · KS 1 and 2 English
- · KS 1 and 2 Geography
- KS 1 and 2 PSHE

Please see pages 7-10 of Lesson Plan 1: Object Handling, for curriculum links



## **Lesson plan 2: Why plants matter**

Explore why plants are so important in our daily lives for: food, shelter, medicine, materials, culture, environment and wellbeing. Take a look at some of the threats to plants and our human responsibility to protect plants.

Teachers can enhance this session by sourcing copyright-free images that show examples of how plants are used around the world.

Session duration: 60 minutes

#### **Curriculum links:**

- · KS 1 and 2 Science
- KS 1 and 2 English
- KS 1 and 2 Geography
- KS 1 and 2 PSHE
- KS 1 and 2 Design and Technology
- KS 2 Art and Design

Please see page 7-10 of Lesson Plan 2: Why plants matter, for curriculum links



## Lesson plan 3: What's your story? Creating your museum

Pupils will work together to create their plant-based museum. They will explore how to produce creative labels and text panels for their objects, to support the story of their museum. Pupils will consider different design approaches for displaying their objects. They will also develop a set of learning outcomes for their visitors.

The **Curating a School Museum Teacher Handbook** can be used to support teachers in deciding what sorts of objects to source.

Lesson plan activities enable teachers and pupils to:

- · create object labels and research facts about the objects
- · discuss the similarities and differences of the plant-based objects
- · reinforce the story of the museum what visitors will learn when visiting the museum?
- think about the interpretation of the objects.
- consider if additional information such as maps locating where the objects come from, recordings of music played on a plant-based musical instruments, illustrations, photographs or videos showing how the object is used or highlighting the plant (or part of the plant) used to make the object.
- think about how to obtain feedback from visitors via interactive activities

Session duration: this session can be adapted for a half day or full day

#### **Curriculum links:**

- · KS 1 and 2 Science
- KS 1 and 2 English
- · KS 1 and 2 Geography
- · KS 1 and 2 Art and Design

Please see pages 9–10 of **Lesson Plan 3: What's your story? Creating your museum**, for curriculum links





## **Kew learning**

Kew's schools programme offers a wide range of sessions to inspire and engage your pupils. We cater for different ages, abilities and learning needs. All sessions are linked to the curriculum.

For further information about our schools programme go to: kew.org/kew-gardens/school-visits

If you are not able to visit us, why not register for Endeavour: kew.org/learning/endeavour

Endeavour is an exciting free series of challenges for Key Stages 2, 3, 4 and 5, linked to the English National Curriculum and open to all UK schools. The Endeavour challenges will engage your pupils in critical thinking about topics related to plants, science and the environment. For each challenge we've included everything you need to deliver an interactive, pupil-led session.