



These resources provide an opportunity for students to assist Natural History Museum scientists by gathering valuable data in their local area for the Urban Tree Project.

The research undertaken in this project gives students an example of current scientific study and allows them to explore ways in which science contributes to helping achieve a more sustainable future.

### **Aims**

The Urban Tree Project is a national survey of trees in parks, streets and gardens in the UK led by the Natural History Museum. A full survey of trees in these spaces has never been conducted before.

Teachers can use the lesson plans and activities as a finite unit of work in class, or select elements to adapt to other programmes of work. Alternatively, students can be supported to carry out the survey activities at home by their own choice or as homework.

### **Learning objectives**

- Students decide on characteristics to help them group leaves.
- Students identify a range of tree species in their local environment.
- Students engage in, and contribute data to, a national survey using methods employed by real scientists.
- Students map a local environment and label tree species they have identified.

### **Curriculum links**

A series of KS2 lesson plans and activities have been designed to provide students with opportunities to develop key skills in science and technological understanding and mathematical understanding, in addition to supporting the overarching development of literacy, numeracy, ICT, social, cognitive and personal skills. The content of the students' activities is framed by the following curriculum links:

#### **National Curriculum 1999**

##### **Key stage 2 Science**

**Sc1 2e** Pupils should be taught to use simple equipment and materials appropriately and take action to control risks.

**Sc1 2h** Pupils should be taught to use a wide range of methods, including diagrams, drawings, tables, bar charts, line graphs and ICT, to communicate data in an appropriate and systematic manner.

**Sc1 4c** Pupils should be taught that the variety of plants and animals makes it important to identify them and assign them to groups.

**Sc2 4b** Pupils should be taught how locally occurring animals and plants can be identified and assigned to groups.

**Sc2 5b** Pupils should be taught about the different plants and animals found in different habitats.

##### **Key stage 2 English**

**En2 2b** Pupils should be taught to look for meaning beyond the literal.

**En2 3a** Pupils should be taught to obtain specific information through detailed reading.

**En2 9a** The range should include diaries, autobiographies, biographies, letters.

**En3 1e** Pupils should be taught to use features of layout, presentation and organisation effectively.

**En3 11** The range of readers for writing should include teachers, the class, other children, adults, the wider community and imagined readers.

## Key stage 2 Geography

**2e** In developing geographical skills, pupils should be taught to draw plans and maps at a range of scales.

## Key stage 2 - Information and communication technology

**3a** Pupils should be taught how to share and exchange information in a variety of forms including email.

**5b** Pupils should be taught the knowledge, skills and understanding through working with others to explore a variety of information sources and ICT tools.

## National Curriculum 2010

### Scientific and technological understanding

**M1** Children should be taught to explore and investigate on order to collect data, analyse it and identify patterns.

**M11** Children should be taught to identify, group and select materials using properties and behaviours that can be tested, and identify and group living things using observable features and other characteristics.

**L2** Children should be taught to make and record accurate measurements and detailed observations, presenting them appropriately, and analyse, interpret and apply them.

**L16** Children should be taught to explore and explain practical ways in which science can contribute to a more sustainable future.

### Mathematical understanding

**L21** Children should be taught to use and make maps, scale models and diagrams for a purpose.

### Essentials for learning and life: Literacy

**3** Children learn how to write, present and broadcast a range of ideas, in a wide variety of forms and with awareness of different audiences and purposes; communicate these ideas with accuracy on paper, on screen and through multimodal texts.

**4** Children learn how to analyse, evaluate and criticise a range of uses of language in order to draw out meaning, purpose and effect.

### Essentials for learning and life: ICT Capability

**1** Children should learn to find and select information from digital and online sources, making judgements about accuracy and reliability.

**3** Children should learn how to collaborate, communicate and share information using connectivity to work with and present to people and audiences within and beyond the school.

These lesson ideas and activities strongly support curriculum aims by helping students develop the skills to become responsible citizens who make a positive contribution to society.

## Links to Natural History Museum activities

### Wildlife Garden

Students are invited to participate in the Wildlife Garden workshops held during summer at the Natural History Museum. These activities allow them to find out more about plants present in local UK habitats and make links to the diversity of invertebrates found in garden and pond environments.

### Explore and Discover guides

The Explore and Discover guides are resources designed to support self-guided visits to Natural History Museum galleries. The Creepy Crawlies guide looks at the features, adaptations and life cycles of invertebrate species found in different environments.

Go to [www.nhm.ac.uk/education/school-activities](http://www.nhm.ac.uk/education/school-activities) for details of these and other Museum activities for schools.

