

This lesson pack has been designed to support the teaching of Science and PSHE, as part of the Tower of London's Superbloom project. It explores the relationship between flowers and pollinators, and how we humans rely on both for our wellbeing and that of our planet.

### HOW TO USE THIS PACK

This pack contains a lesson plan that explores the ecology found within a pollinator garden, and the importance of pollinators to the garden's survival and, indirectly, to our own.

This pack also provides activity cards, activity resources and supporting materials as outlined below to support the lesson plan. The lesson plan is intended to combine learning in relation to the Science curriculum and PSHE.

**THE PRIMARY LESSON PLAN** and resources are targeted at KS2 reading level but can be adapted for older or younger learners. The 'Ideas for additional activities' section provides suggestions for differentiated activities that could replace any in the lesson plan, or as extension tasks. The lesson plan could be used for a science lesson and/or to support the Schools PSHE/PDP activities.

**THE SECONDARY LESSON PLAN** and resources are targeted at KS3, but the written tasks could be differentiated so that they are suitable for learners in KS4. The lesson plan could be used for a science lesson and/or to support the Schools PSHE/PDP activities. The 'Ideas for additional activities' section provides suggestions for differentiated activities that could be used to replace any in the lesson plan, or as extension tasks.

### THE PACK INCLUDES:

#### Activity Cards

These are designed for teachers and provide instructions for each activity. They provide prompts for discussing in class how gardens can be used to learn about maintaining human health.

#### Activity Resources (AR)

These are designed for students to complete independently, while working with a partner or group. They need to be photocopied or printed out. There are a number of Activity Resources for each lesson plan that support observation activities to be conducted in the garden. Some of the Activity Resources have questions to be used collaboratively between students and teacher.

#### Supporting Materials (SM)

These are designed to support the lesson and individual activities. They need to be photocopied or printed out and could be laminated.

*A number of Supporting Materials have also been provided to replace activities in the lesson plan or to be used as extension activities (see the Ideas for additional activities section on the lesson plans).*

## OVERVIEW OF LESSON PLANS

The theme of both the primary and secondary lesson plans is the ecology found within a pollinator garden. The need to protect from climate change and species loss is now fully embedded in the public conscience. The science behind the need for humans to reduce their negative impact on the planet is clear and overwhelming.

These lesson plans provide the opportunity to integrate Science lessons around pollinator plants and their vital contribution to a healthy planet, with life lessons for human health and wellbeing in line with PSHE guidelines (PSHE Association).

The lesson is mostly based outdoors, where students will observe and record different interactions within the garden between the likely species to be found there. These observational activities are also designed to encourage discussion about human health.

To prompt thinking about how gardens can be used to learn about human wellbeing, we have included a relaxation testing activity - using a simple 'relaxation thermometer' students will record their relaxation level prior to going into the garden and at the end of the time in the garden. It is anticipated that general relaxation will be achieved through being in the garden and that this can prompt thoughts and discussion.

This lesson is best done when weather is good and plants are in flower, possibly late May, June, July and possibly September.

## TOPIC INTRODUCTION

Humans are part of the natural world. To have a positive impact on the natural world requires us to know how we compete and cooperate with other species. Through cooperating more than competing with them, we are likely to be healthier at both societal, community and individual levels.

How a healthy planet is important to human health is best summed up by the concepts put forward by ecopsychology (the study of the emotional bond between humans and the Earth). As a demonstration of how humans are part of ecology we can, not surprisingly, use lessons from the natural world to think about our own health. Observing nature encourages us to consider our own behaviours and needs in relation to both planetary and human health.