

INTRODUCTION

This module is concerned with the structure and dynamics of ecosystems. It contains material on the growth of plants, and the key role of producers in ecosystems. This is developed into a simple treatment of food chain, starting with familiar examples on land and moving into the ocean.

In designing material, we focussed on these elements of the National Curriculum for Key Stage 1 Science:

Plants need light to grow
Understand local environment, and plants and animals within this

We have sought to promote the following skills and aspects of scientific enquiry:

Importance of collecting evidence, including observation and measurement
Investigative skills: understand testing and comparison
Communication using a variety of media, including speech, writing, tables, simple graphs
Make simple comparisons and identify simple patterns or associations
Use of multimedia sources

Below, we summarise the materials available for this module at Key Stage 1. There is a separate *Users' Guide*, which gives more information about each type of resource.

RESOURCES

1. Teaching aids

Please see the notes relating to teaching aids in the *Users' Guide*.

The following PowerPoint™ slide sequences are provided to support this science module:

How plants grow [basic]
(intended for Key Stages 1- 2)

A description of how plants grow on land and in the ocean. Introduces the basic process of photosynthesis, including the need for light and the implications for plants growing in the deep ocean.

Food chains and food webs: who eats whom? [basic]
(intended for Key Stage 1)

An introduction to food chains, starting with a simple grass-rabbit-fox system and then moving on to ocean systems. It develops the concept of a food web as a series of food chains within a community. Associated quiz and worksheet.

2. On-line activities

Please see notes on quizzes and spreadsheets in the *Users' Guide*.

Who eats whom? Food chains on land and in the oceans
(quiz intended for Key Stage 1)

Students are shown simple food chains, then complete their own by placing objects and captions. Two scored elements, with two attempts at each question. Relates to slide sequence *Food chains and food webs: who eats whom?* [basic]. Tests biological knowledge, uses 'drag-and-drop' technique.

3. Worksheets

Please see notes on worksheets in the *Users' Guide*.

Who eats whom?
(intended for Key Stage 1)

The worksheet is based on two montages of simple food chains – one on land and one in the ocean. The diagrams come from the PowerPoint slide set *Food chains and food webs: who eats whom?* (Key Stage 1). Students are asked to annotate the diagrams to indicate which are plants, herbivores and carnivores, and to add arrows to complete the representation of the food chain. The sheet involves terminology which may be unfamiliar to students, and which will need to be explained. The sheet tests and reinforces understanding of the basic functioning of food chains, and interpretation of visual and textual information.

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