

## PROVISIONAL PROGRAMME

### Introduction

- Introduce microhabitats, biotic and abiotic factors.
- Breathing and feeding adaptations to freshwater life.
- Feeding relationships in the pond and construction of food chains.

### Field Site 1: Meadow Pond

- Sweep sampling of invertebrates in two microhabitats of the pond.
- Identifying invertebrates using keys.
- Measuring abiotic factors including light and temperature.

### Field Site 2: Woodland Pond

- As Field Site 1.



### Review

- Construct pyramids of numbers to illustrate the feeding relationships in the ponds.
- Discuss why the two ponds have different invertebrates by analysing the abiotic data.

**SAFETY** All activities and sites are risk assessed. Recommended adult: child ratio of 1:12.

**CLOTHING** Appropriate outdoor clothing. Indoor & outdoor footwear.

**BEHAVIOUR** Teachers are responsible for good behaviour & lunchtime supervision.

**RESOURCES** All resources are provided.

**ICT** There is the option of using a digital camera to record techniques. Photos on a disk cost £5

## LEARNING OUTCOMES

*Most students will (N.C. Level 5/6)*

- recognise that feeding relationships form food chains
- explain why it is necessary to use a reasonably large sample when investigating the habitat preferences of small invertebrates
- explain that a variety of organisms are found in different habitats because of differences in environmental factors.
- sequence a food chain.
- identify features which are different in different habitats.
- identify predators and prey and their features.
- explain the direction of arrows in a food chain.

*Some students will not have made as much progress and will (N.C. Level 4/5)*

- recognise that feeding relationships form food chains
- explain why it is necessary to use a reasonably large sample when investigating the habitat preferences of small invertebrates
- explain that a variety of organisms are found in different habitats because of differences in environmental factors.
- sequence a food chain.

*Some students will have progressed further and will (N.C. Level 6/7)*

- describe adaptations to life in water.
- pick out appropriate adaptations and explain clearly their significance.
- identify a suitable question for investigation.
- describe some strategies which plants and animals adopt to avoid climatic stress.
- explain the advantages that adaptations give an organism.

### ASSESSMENT

Progress assessed by open-ended questioning, peer discussion and explanation of hypotheses and results.

### PRIOR LEARNING

Construct a food chain using the arrow convention correctly.

### FUTURE LEARNING

Produce a well-structured report that draws on evidence to reach conclusions.