

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 temperature, pH, light and oxygen levels and substrate depth.

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 and lunchtime supervision.

RESOURCES All resources are provided.

ICT There is the option of using a digital camera to record techniques.



LEARNING OUTCOMES

Most students will

- Make hypotheses, collecting data to test the hypotheses and used the data to draw conclusions.
- Describe adaptations to life in water.
- Understand food chains and be able to draw and interpret a pyramid of numbers.
- Work safely and reduce their impact on the environment
- Describe the relationship between biotic and abiotic factors

Some students will not have made as much progress and will

- Identify features which are different in different habitats
- Identify organisms found in a habitat
- Made hypotheses and collected relevant data.

Some students will have progressed further and will

- Consider the reliability of the data collected and suggest other factors that could influence the results.
- Identify the relationship between organism distribution and specific adaptations.

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 which draws on evidence to reach conclusions.