

### PROVISIONAL PROGRAMME

#### POND INVESTIGATION

- Introduce microhabitats, biotic and abiotic factors.
- Feeding relationships in the pond and construction of food chains.

##### Field Site 1: Meadow Pond

- Sweep sampling of invertebrates in the pond.
- Identifying invertebrates using keys.
- Measuring abiotic factors including light levels and substrate depth.

##### Review

- Construct pyramids of numbers to illustrate the feeding relationships in the pond.

#### WOODLAND INVESTIGATION

- Comparison of deciduous and coniferous woodland.

##### Field Sites 2 & 3: Deciduous & Coniferous Woodland

- Random sampling of ground layer using a quadrat.
- Identifying vegetation using keys.
- Measuring micro-climate including temperature, light, wind speed, precipitation and humidity.
- Sample soils for pH.

##### Review

- Compare the vegetation, soils and microclimate in the two woodlands.
- Consider the limitations of the fieldwork.

### SPECIFICATION LINKS

#### Most students will

- Make hypotheses, collect data to test the hypotheses and use the data to draw conclusions.
- Understand the differences between a coniferous and deciduous woodland.
- Identify predators and prey and their features
- 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
- Make hypotheses and collect 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.

**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.

#### ASSESSMENT

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

#### PRIOR LEARNING

Review habitats, food chains and ecosystems.

#### FUTURE LEARNING

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