

Habitats – KS2 Science

Duration	60 mins
Curriculum areas covered:	Living Things and Their Environment <ul style="list-style-type: none"> Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. identify and name a variety of plants and animals in their habitats, including microhabitats.
Skills:	Working Scientifically: <ul style="list-style-type: none"> gathering, recording, classifying, and presenting data in a variety of ways to help in answering questions. recording findings using simple scientific language, drawings, labelled diagrams, keys, and tables.
Teaching objectives:	By the end of this lesson, the children will be able to: <ul style="list-style-type: none"> Use simple field equipment to sample animals in a woodland or lake environment. Use an identification key to identify animals found in a woodland or lake habitat. Understand and explain what animals need from a habitat in order to survive.

Key vocabulary: habitat, food, shelter, survive, oxygen, water, adaptation, camouflage, tally, microhabitat.

Resources:

Lake: Trays, nets, buckets, spoons, freshwater invertebrate id keys, pallets, hand lenses, microscope, clipboards.

Woodland: Foam mats, magnifying chambers, spoons, woodland invertebrate id keys, hand lenses, clipboards.

Activities

Starter 10 mins - Whole class discussion:

What is a habitat? Types of habitats? What do animals need from a habitat to survive? How are polar bears adapted to living in cold conditions? Compare with how sticklebacks and centipedes are adapted to live in their habitats.

Main 40 mins - Half of class undertake lake sampling while other half undertake woodland sampling:

Lake sampling

Based at the dipping steps. Trays on top step. In teams, children use a bucket to half fill tray with clean lake water. Teacher demonstrates safe way to hold net, to carefully collect sample, and to rinse net into tray. Only those with net to be on steps. Hand out nets to children. One adult to be stationed at base of steps.

Identification - Children use spoons and pallets to collect and sort animals from their tray into pallet modules. On picnic benches, use identification keys to identify the animals and record numbers on the pond life tally worksheet.

Microhabitats - If time use hand lenses/microscope to observe animals in detail and discuss microhabitats.

Return animals to the lake.

Woodland sampling

Show the boundaries for safe hunting of woodland animals. Where might the animals be found (leaves, under rocks and logs)? No slugs and snails in pots as they get stressed and make foam.

Identification - Children sit on foam mats. Use identification keys to name animals and record numbers found of each type on woodland animals tally worksheet.

Microhabitats - If time use hand lenses/microscope to observe animals in detail and discuss microhabitats.

Return animals to where they were found.

Plenary (for both habitats) 5-10 mins

What animals have been found? How are they adapted to their habitat? Which were most frequent and why?

Differentiation	<p><i>Stretch and challenge:</i></p> <p>Option 1: Draw and label one invertebrate. How are they adapted to their habitat?</p> <p>Option 2: Have other field guides available for finding out more about the animals.</p> <p><i>To support additional educational needs:</i></p> <p>Extra teacher and TA support as needed.</p>
------------------------	--