

Curriculum Outdoors

Curricular Area: Science- Biodiversity and Interdependence

<p><u>Experiences and Outcomes</u></p> <p>I can sample and identify living things from different habitats to compare their biodiversity and can suggest reasons for their distribution. SCN 3-01a</p> <p><u>Learning Outcome</u></p> <p>Pupils will learn how to complete a simple habitat survey using a variety of tools to identify living things and describe the characteristics of a variety of habitats.</p>	<p><u>Resources</u></p> <p><u>Biological Identification Charts –</u> <u>Publications on sale</u> E.g. Field Studies Council Guides https://www.field-studies-council.org/product-category/publications/?fwp_publication_type=fold-out-guide</p> <p><u>Online Resources</u> E.g. Invertebrates https://www.imperial.ac.uk/media/imperial-college/research-centres-and-groups/opal/Invertebrates-guide--UPDATED-FINAL.pdf</p> <p><u>Apps</u> <u>Trees</u> E.g. https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/british-trees/tree-id-app/</p> <p><u>Quadrats</u> <u>Clipboards, pens</u> <u>Recording sheets (3 per group)</u> <u>Outdoor thermometer</u> <u>Light meter – Mobile App</u> <u>School grounds map</u></p>
<p><u>Activity</u> Find and Describe Habitats within the School Grounds</p> <ol style="list-style-type: none"> Indoors or outside, discuss the various tools for collecting and identification and explain use of thermometer and light meter. Establish what constitutes High, Medium and Low levels for both temperature and light. In groups of 2 or 3, pupils explore the variety of habitats for plants and invertebrates within the school grounds and use ID keys to accurately identify species. Pupils record the information for each habitat on the record sheet. Use quadrat to define the survey area for each. Pupils feed back to the larger group describing the variety of habitats, some of the organisms found and any patterns in distribution they have noticed (the community associated with a habitat, for example). Pupils identify habitats with the most biodiverse population. Pupils make suggestions for why certain organisms are found in certain habitats. Referring to previous learning about food webs, pupils describe how organisms rely on each other and surrounding habitats. Pupils make suggestions about possible impact of changes to habitats and to communities of species. 	<p><u>Assessment</u></p> <p>Successful identification of various living things using biological keys .</p> <p>Pupils describe the different characteristics of the habitats found (focus on light and temperature).</p> <p>Pupils can make suggestions for why different organisms are found in different habitats.</p> <p>Pupils can suggest how organisms rely on each other and describe a simple food web.</p> <p>Pupils make suggestions for adapting or amending the recording sheet for future survey – What worked well? What might change? What other tools or equipment would help us create a similar but more complex survey? What other criteria can we use to describe and define a habitat?</p>