

Living Things and Their Habitats

Science | Year 4 | Unit Overview

Introduction

In this unit children explore a variety of ways to identify, sort, group and classify living things. They learn how animals are split into 'vertebrates' and 'invertebrates' and begin to consider the differences between living things within these classifications. They use and create classification keys to group, identify and name living things from the local habitat and beyond. This unit also introduces children to the idea that environments are subject to human-made and natural changes, and that these changes can have a significant impact on living things. Throughout the unit children work scientifically by gathering, recording and presenting information in different ways.

Health & Safety

Several of these lessons involve trips outdoors so make appropriate preparations, including carrying a first aid kit equipped to deal with cuts, scrapes, bites and stings. Be sure that children are aware of how to handle living things safely and carefully, and which plants and animals they should take care to avoid. Follow any school policies about trips regarding adult ratios and parent/carer permission.

Home Learning

Grouping Plants Activity Sheet

Children generate criteria to sort a variety of plants into a Venn diagram.

Woodland Habitat Classification Key Activity Sheet

Children organise the questions to sort common UK wildlife using a classification key.

Assessment Statements

By the end of this unit...

...all children should be able to:

- Sort living things into groups.
- Generate questions about animals.
- See similarities and differences between vertebrates.
- Identify vertebrate groups.
- Identify the characteristics of living things.
- Suggest how to have a positive effect on the local environment.
- Record observations on a map.
- Name some endangered species.

...most children will be able to:

- Generate criteria to use to sort living things.
- Sort living things into a Venn diagram.
- Sort living things into a Carroll diagram.
- Use questions to sort animals using a key.
- Use a key to identify invertebrates by looking at their characteristics.
- Use the characteristics of living things to sort them using a classification key.
- Show the characteristics of living things in a table.
- Create a classification key.
- Identify dangers to wildlife in the local and wider environment.
- Record observations in a table.
- Write a report.
- Present findings to the class.

...some children will be able to:

- Explain, using evidence, how they have identified invertebrates.
- Explain in more detail how changes to the environment have affected endangered species.

Lesson Breakdown

1. Grouping Living Things

To recognise that living things can be grouped in a variety of ways by sorting living things into a range of groups.

- I can group living things in a range of ways.

Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions by using a range of methods to sort and group living things.

- I can use a range of methods to sort living things.
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2. Classifying Vertebrates

To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment by generating questions to sort vertebrates in a classification key.

- I can generate questions to use in a classification key.

Identifying differences, similarities or changes related to simple scientific ideas and processes by identifying vertebrates by their similarities and differences.

- I can identify vertebrates by observing their similarities and differences.
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3. Invertebrate Hunt

To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment by using keys to identify invertebrates found in the local environment.

- I can use a key to identify invertebrates.

Using straightforward scientific evidence to answer questions by explaining how they have identified an invertebrate.

- I can use evidence to identify an invertebrate.
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Resources

- Magnifying glasses
 - Clipboards
 - Items for capturing and carrying invertebrates e.g. paint brushes, plastic spoons, plastic pots with lids
 - Hand sanitiser
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4. Classification Keys

To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment by creating classification keys.

- I can create a classification key.

Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions by creating tables and keys showing the characteristics of living things.

- I can show the characteristics of living things in a table and a key.
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Resources

- Mini whiteboards and pens - class set
- Sticky notes

5. Local Habitat Survey

To recognise that environments can change and that this can sometimes pose dangers to living things by identifying changes and dangers in the local habitat.

- I can recognise positive and negative changes to the local environment.

Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and table by recording observations on a map and in a table.

- I can record my observations in different ways.

Resources

- Clipboards
- Make preparations for an outdoor visit to a suitable local habitat. This could be a local park or an area of the school grounds that will show signs of man-made changes.

6. Environmental Changes

To recognise that environments can change and that this can sometimes pose dangers to living things by learning about environmental dangers and endangered species.

- I can describe environmental dangers to endangered species.

Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions by writing about and orally presenting findings from research.

- I can present my findings orally and in writing.

Resources

- Topic books on endangered species
- Internet access