

Biodiversity Study

- Key Stage 1

Overview

The purpose of the Biodiversity Study is for pupils to conduct a survey, using tally charts, of the wildlife on a local site (within their school grounds). This will look at animal and plant life. This pack also includes follow up questions and ideas that a teacher can use with the pupils.

Goals

- Pupils to recognise and name local species of plant and animal life. They will record insect, mammal, plant and bird life in a tally chart (with photographs to aid recognition). This process of recording will help children to remember the names of local wildlife; and it is a chance to practise careful and accurate recording.
- Pupils to explore and understand that a range of wildlife can be found in one habitat.
- Pupils to practise the accurate collection of data onto a tally chart. In the final column of the tally chart additional notes could also be taken to meet a focused scientific question (for example: Where was the species seen?)
- Pupils can classify their findings using given categories or their own. They can decide on similarities and differences and then sort into basic groups. These can then be sub-divided into smaller categories.
- This is an opportunity for a detailed scientific report to be drawn up afterwards with the pupils drawing conclusions from their results.

National Curriculum Links

Science

Observing closely using simple equipment

Identifying and classifying

Gathering and recording data to answer questions

Identify and name a variety of common wild plants, including deciduous and evergreen trees

Identify and name a variety of common animals including amphibians, reptiles, birds and mammals

Observe changes across the four seasons

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

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Maths

Identify and represent numbers using objects and pictorial representations.

Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.

English

Writing for different purposes.

ICT

Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

KS1 - Years 1-2

Science

Maths

English

ICT

Materials & Resources

- Clipboards
- Pencils
- Magnifying jar or magnifying glass
- Pooters
- iPad/Camera
- Biodiversity Tally charts for insects, birds/mammals & plants.

Before the Study

- Hold a brief discussion to find out what the children already know. What sort of wildlife would they expect to find on an empty field? What do they think encourages insect/plant/mammal/bird life? Alternatively what might discourage it?
- Explain the term biodiversity – a term which describes the variety of plants and animals in their natural environment.
- Do they know many of the names of the creatures that they will be searching for?
- Encourage pupils to think about where they might look in the school grounds, for example under any large stones or in the earth might be a good place to sport an earthworm. This will aid discoveries and discussions on habitat.
- Discuss how the children should treat any wildlife they find as they need to learn to respect their local environment.

During the Study

- Decide how long pupils will be outside carrying out their wildlife survey. Children should be encouraged to note the time of year, the location and the weather. This will mean that if they are going to repeat it in the future, it will need to be the same amount of time, in order to be a fair test.
- Children complete the tally chart on 3 separate sheets, recording plants, insects, mammals and birds.
- Children could take pictures of their findings, to support their survey.

After the Study

- If pictures have been taken, children can put the wildlife into groups, stating how they have been classified.
- Write a short report considering how diverse the wildlife is in the school grounds. If it is not very diverse, what could be done to encourage more wildlife? Children can write a scientific conclusion including why wildlife is more successful in one location than in another.
- The 'yes/no' game: children can identify what sort of creature you are talking about by only asking questions which can be answered yes or no. They should use scientific language when asking questions, for example: wings, habitat, and prey.
- Children can use a simple computer program to produce a yes/no tree diagram to categorise organisms which live around them.
- Having carried out the initial investigation children could use this as a starting point to plan follow up investigations – posing questions themselves and then investigating the answers, for example: where are most small insects found? Does the weather affect collecting insects?

Notes

- Pupils must wash their hands after touching any wildlife.
- The blank spaces at the bottom of the tally chart are for any additional wildlife sighting.