



Living things and their Habitats

1. Can I describe how living things are grouped based on similarities and differences?

- **Prior Learning (Year 4 - Autumn):** Grouped living things (legs/wings/fur/living in water)
 - **Vocab:** living things, habitat, classification, characteristics,
 - Know that living things can be grouped based on similarities and differences in their observable characteristics.
 - Know that characteristics are features that help us identify and group living things, (e.g. number of legs, body covering, habitat).
 - Know that classification helps scientists organise living things in a structured way.
 - Know that grouping decisions should be based on observable evidence rather than opinion.
- (note for teachers – suggested task: provide a wide range of animal and plant images and ask children to group them using observable characteristics such as number of legs, presence of wings, type of body covering (fur, scales, feathers), habitat (land/water), or method of movement (flying, swimming, walking), then justify their groupings using evidence.)
- **Identifying scientific evidence that has been used to support or refute ideas or arguments**

2. Can I classify animals into vertebrates and invertebrates using observable characteristics?

- **Prior Learning (last lesson):** grouped living things using observable characteristics
 - **Vocab:** observable, characteristics, vertebrate, invertebrate,
 - Know that animals can be classified into two main groups: vertebrates and invertebrates.
 - Know that vertebrates are animals with a backbone, while invertebrates do not have a backbone.
 - Know that observable characteristics can be used to classify animals into these groups, (e.g. presence of a skeleton inside the body, number of legs, body structure).
 - Know that classification diagrams and labelled groupings help to organise animals clearly.
- (note for teachers – suggested task: provide a range of animal images. Ask children to sort them into vertebrates and invertebrates using characteristics such as presence of a backbone, type of body (soft body or skeleton), and movement (slithering, flying, walking), then record results using a labelled diagram or chart.)
- **Recording data and results of increasing complexity using scientific diagrams and labels**

3. Can I classify animals into specific groups using their characteristics?

- **Prior Learning (last lesson):** classified animals into vertebrates and invertebrates
 - **Vocab:** characteristics, mammal, amphibian, reptile, bird, fish
 - Know vertebrate animals can be classified into 5 main groups: mammals, birds, reptiles, amphibians and fish.
 - Know that each group has specific observable characteristics, (e.g. mammals have hair or fur and give birth to live young, birds have feathers and lay eggs).
 - Know reptiles have dry scales and lay eggs. Amphibians live on land and water, and fish have gills and fins.
 - Know diagrams and classification charts can be used to organise animals into these groups accurately.
- (note for teachers – suggested task: provide a wide range of vertebrate animal images; ask children to sort them into the five groups using characteristics such as body covering (fur, scales, feathers), habitat (water/land), and method of reproduction, then record results using a classification chart or branching diagram.)
- **Recording data and results of increasing complexity using scientific diagrams and labels**

6. Can I give reasons for classifying living things based on specific characteristics?

- **Prior Learning (last lesson):** created classification keys for living things
- **Vocab:** justify, classifying, characteristics, evidence
- Know that living things are classified based on specific observable characteristics.
- Know that classification decisions should be justified using clear evidence, (e.g. body covering, reproduction, habitat, structure).
- Know different classification systems group living things in structured way based on shared features.
- Know that scientists such as Carl Linnaeus developed classification systems to organise living things more effectively.
- **note for teachers – suggested task:** provide unfamiliar plants and animals (or images) and ask children to classify them using a key, then justify their decisions in writing or verbally, explaining which characteristics they used and why, and discussing whether their conclusions are reliable.)
- **Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms**
- **Identifying scientific evidence that has been used to support or refute ideas or arguments**

5. Can I use and create classification keys to identify living things?

- **Prior Learning (last lesson):** classified plants and microorganisms using characteristics
 - **Vocab:** classification key, living thing,
 - Know that a classification key is a tool used to identify living things by answering a series of questions about their characteristics.
 - Know that classification keys use a sequence of questions to sort living things into groups, (e.g. "Does it have wings?" → yes/no).
 - Know that keys help scientists identify unfamiliar plants and animals.
 - Know that creating a classification key requires identifying clear and observable characteristics.
- (note for teachers – suggested task: provide images of local plants or animals and ask children to use an existing key first, then create their own branching key using yes/no questions based on observable characteristics such as number of legs, body covering or leaf shape.)
- **Recording data and results of increasing complexity using scientific diagrams and labels, classification keys**

4. Can I classify plants and microorganisms based on their observable characteristics?

- **Prior Learning (last lesson):** classified animals into specific vertebrate groups
 - **Vocab:** classify, plant, microorganism, observable characteristics,
 - Know that living things can be grouped into broad categories such as animals, plants and microorganisms.
 - Know that plants can be classified based on observable characteristics, (e.g. presence of flowers, leaves, seeds, or whether they are flowering or non-flowering).
 - Know that microorganisms are very small living things that cannot always be seen with the naked eye, (e.g. bacteria, fungi).
 - Know that observable characteristics and evidence can be used to classify plants and microorganisms.
- (note for teachers – suggested task: provide examples or images of different plants and microorganisms and ask children to group them using observable features such as presence of flowers or seeds (plants) and visible structures or uses (e.g. mould, yeast) for microorganisms, then record their groupings using a classification chart or diagram.)
- **Recording data /results of increasing complexity using scientific diagrams and labels**