Year 4 – Living things and their habitats – Which living things can we identify in our local area? Lesson 1

Lesson	1 of 6

Learning objective

I can use observable features to group and sort objects.

National Curriculum links

NC Y4

Children will:

- recognise that living things can be grouped in a variety of ways

Working scientifically:

- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- 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, bar charts and tables

Key lesson question	How do observable features help us group and sort things?

Resources

- lesson presentation (ppt)
- activity 1 – blank Venn diagram
- activity 2 – blank Carroll diagram
- button sorting cards
- shape sorting cards
- focused assessment sheet

Teaching input

- **Scientific enquiry types and skills** – Review the 'scientific enquiry types' and 'working scientifically skills' the children will use in this lesson, highlighted on the slide.
- **Which living things can we identify in our local area?** – The slide shows the lesson questions the children will answer in this unit. The current lesson's question is highlighted on the slide.
- **Key vocabulary for this lesson** – Go through the key vocabulary for this lesson and their definitions. Have any of the children heard these words before? Did they already know their meanings?
- **Identifying and classifying** – Introduce Zoe. Choose a child to read what Zoe says about the scientific enquiry type 'Identifying and classifying'. Using classification keys in Year 4 focuses on observable features rather than on scientific classifications based on features that are not observable.
- **What is an observable feature?** – Read through the information on the slide. Explain the difference between observable and non-observable features.
- **What is not an observable feature?** – Read through the information on the slide.
- **Let's discuss** – Read through the information on the slide. The children are to discuss the question on the slide with their learning partners, in groups or as a class. Take feedback from the class before the answers are displayed on the following slide.
- **Sorting and grouping** – Read through the information on the slide. The children are to discuss the question on the slide with their learning partners, in groups or as a class. Take feedback from the class before the answers are displayed on the following slide.
- **What is a Venn diagram?** – Read through the information on the slide.
- **Venn diagram** – Read through the information on the slide.
- **Classifying objects using a Venn diagram** – Read through the information on the slide.
- **Using a Venn diagram** – The children are to discuss the question on the slide with their learning partners, in groups or as a class. Take feedback from the class before the answers are revealed on the following slide.
- **Activity 1** – The children are to use the button or shape activity cards or objects on their tables (teacher to source), choose two features they can see and use them as the headings for their own Venn diagrams on their activity 1 worksheets. They should look for features which group and sort the objects in different ways.
- **What is a Carroll diagram?** – Read through the information on the slide.
- **Carroll diagrams** – Read through the information on the slide.
- **Using a Carroll diagram** – The children are to discuss the question on the slide with their learning partners, in groups or as a class. Take feedback from the class before the answers are revealed on the following slide.
- **Activity 2** – The children are to choose two yes/no questions for their own Carroll diagrams on their activity 2 worksheets and then sort the buttons, shapes or other objects into the correct boxes.
- **Venn and Carroll diagrams** – Read through the information on the slide.
- **Let's discuss** – The children are to discuss the questions on the slide with their learning partners, in groups or as a class. This slide compares the two sorting methods, noting that the Venn diagram is best for examining common features, whereas the Carroll diagram splits into distinct groups. There are sentence starters on the slide to help them. Take feedback from the class.
- **Challenge** – The children are to discuss the questions on the slide with their learning partners, in groups or as a class. Take feedback from the class before the answers are revealed on the following slide.

Main activity

Activity 1 – Children should use either the button or shape activity cards provided or objects provided by the teacher. They should examine the observable features and use a Venn diagram to group and sort the objects in different ways.

Activity 2 - Children should use either the button or shape activity cards provided or objects provided by the teacher. They should look at the observable features and use the Carroll diagram to group and sort the objects in different ways.

Challenge

Children look at the three images of marine animals. They discuss which features would put them in the same group and which would put them in different groups with their learning partner before sharing ideas with the class. Reveal the answer on the following slide.

Cumulative quiz questions

1. What observable features could you use to group and sort this button?
2. What two observable features could you use to sort and group these shapes?
3. Look at the Carroll diagram. Where should we put this button?

Self-assessment

- I can spot observable features when looking closely at objects.
- I can choose features to group objects in different ways.
- I can use Venn and Carroll diagrams to show how I have sorted objects.

Grammarsaurus

Key vocabulary

characteristic – a feature or part of something that helps with identification
classify – to group things based on similarities
feature – a distinctive part of something
observe – to look at something carefully to notice details about it