Year 5 – Biomes and ecosystems – What trees, plants and animals are in our local ecosystems? Lesson 1

Lesson	1 of 5

Learning objective

I can identify the biome the UK belongs to and give examples of its ecosystems.

National Curriculum links

NC KS2:
Children will:

- identify the position and significance of latitude, longitude, the equator, the northern hemisphere, the southern hemisphere, the tropics of Cancer and Capricorn, the Arctic and Antarctic Circles
- describe and understand key aspects of physical geography including climate zones, biomes and vegetation belts

Key lesson question	What biomes and ecosystems are found in the UK?

Resources

- lesson presentation (PPT)
- activity worksheet (scaffold and stretch versions are available)
- practical activity ideas
- focus assessment sheet

Teaching input

- **Geographical knowledge and concepts** – Review the 'geographical knowledge' and 'geographical concepts' the children will use in this lesson, highlighted on the slide.
- **What trees, plants and animals are in our local ecosystem?** – This 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?
- **Locational knowledge and physical geography** – Introduce Allisandra. Choose a child to read what Allisandra says about the key geographical knowledge, 'Locational knowledge' and 'Physical geography'. Allisandra introduces the idea of how location can affect physical geography. Introduce the vocabulary in the "New word alert" box.
- **Longitude and latitude** – Read through the information on the slide. Share the map that introduces the concepts of lines of longitude and latitude.
- **Lines of latitude** – Read through the information on the slide. Share the diagram showing the positions of the tropic of Cancer/Capricorn and the Arctic/Antarctic Circles. Explain how latitude affects the temperature of a place.
- **What is a biome?** – Read through the information on the slide. Spend time looking at the map and its key to learn more about the types of biomes and where they can be found. Go through the keyword and its definition in the 'New word alert!' box.
- **World biomes** – Read through the information on the following two slides. Share the information about the different types of biomes and their key characteristics.
- **What type of biome is the UK in?** – Read through the information on the slide. Go through the keyword and its definition in the 'New word alert!' box.
- **Word detective** – Read through the information on the slide.
- **What is it like in a temperate forest biome?** – The children are to read the statements on the slide about the conditions within a temperate forest biome and discuss which one they think is false with their learning partners, in groups or as a class. Take feedback from the class before the answers are revealed on the following slide.
- **What type of vegetation belt does the UK belong to?** – Read through the information on the slide. Go through the keyword and its definition in the 'New word alert!' box.
- **What animals are found in the UK?** – Read through the information on the slide. Go through the keyword and its definition in the 'New word alert!' box.
- **What ecosystems are there in the UK?** – Read through the information on the slide. Go through the keyword and its definition in the 'New word alert!' box.
- **Ecosystem activity** – The children are to look at the photographs of places around the UK on the slide and, with their learning partners, in groups or as a class, name the main ecosystem shown in each picture. There is a word bank to help them. Take feedback from the class before the answers are revealed on the following slide.
- **Let's discuss** – 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** – The children are to answer the questions on their activity worksheets to describe a temperate forest biome and the types of ecosystems found there. Children will identify which biome the UK is mainly part of and select its main characteristics. Children to identify and name examples of UK ecosystems. There are stretch and scaffold versions available.
- **Challenge** – The children are to discuss the questions on the slide with their learning partners, in groups or as a class. There are sentence starters on the slide to help them. Take feedback from the class before the answers are revealed on the following slide.

Main activity

Children will identify which biome the UK is mainly part of and select its main characteristics. Children to give examples of UK ecosystems.

Challenge

Children discuss: If we changed one thing in the UK's temperate biome, such as the amount of rainfall or the number of trees, how do you think it would affect the plants, animals, and ecosystems here? Why?

Cumulative quiz questions

1. What is an ecosystem?
2. What type of biome is the UK part of?
3. What is a vegetation belt?
4. What are the conditions of a temperate forest biome?

Self-assessment

- I know the UK is in a temperate forest biome and can describe its climate.
- I can explain what an ecosystem is and give examples of ecosystems found in the UK.

Key vocabulary

climate – the usual weather over a long period

deciduous – a plant that loses its leaves in autumn
equator – an imaginary circle around Earth which divides it into two equal parts
evergreen - a plant that keeps its green leaves all year