

Ecosystems

Aim: To introduce students to different UK ecosystems.

Learning Objectives:

- Name some UK ecosystems
- Describe some of the animal and plant species found in each ecosystem
- Explain how abiotic and biotic factors affect each ecosystem

Curriculum Links

- National Curriculum Science

Materials and equipment

- Ecosystem worksheet

Key Vocabulary

Ecosystem, Abiotic factors, Biotic factors, Habitat, Species

Lesson Plan

Starter – What is an ecosystem?

Give students a KWL grid and ask them to complete the first two sections – what they know, and what they would like to know. Glue into books.

Remind students of the definition for a habitat. Present them with a definition for an ecosystem, and give the example of a rainforest. Give students 1 minute to write down everything they know about a rainforest ecosystem. Ask each student for one idea to add to the white board.

Introduce the idea of abiotic and biotic factors which can affect the ecosystem. With student's help, highlight abiotic and biotic factors on the board using coloured pens. Erase any suggestions which don't fit. This will provide a list of factors for the main activities.

Activity 1 – UK Ecosystems

It is easy to overlook the diversity of ecosystems within the UK. At this stage, it may be useful to show students a couple of video clips with live footage of heathland, deciduous woodland and the sea coast, asking them to make observations before discussing. Equally, you could also show the Ecosystems PPT which includes images of all three habitats.

Ask students to use the knowledge they have gained to complete the Ecosystem worksheet.

Activity 2 – Research activity

Either using books or ICT resources, students are to work in small groups to choose one ecosystem to research in depth. Provide students with the below outline to help structure their research. Student's research time should be limited to ensure quality over quantity.

Give groups time to present their findings – this could be a PPT presentation, poster or information booklet for the New Forest National Park.

Groups share their presentation with the class. Revisit the success criteria before the first presentation, and ask the class to provide peer assessment against these.

Plenary - KWL Grid

Students to revisit the KWL Grid, adding 2 things which they have learnt in today's lesson. Ask students to share these with the class.

Extension

Research could be extended to include an additional section focusing on the human impacts on their chosen ecosystem, and what is currently in place to minimise damage to the environment.