

## What are ecosystems?

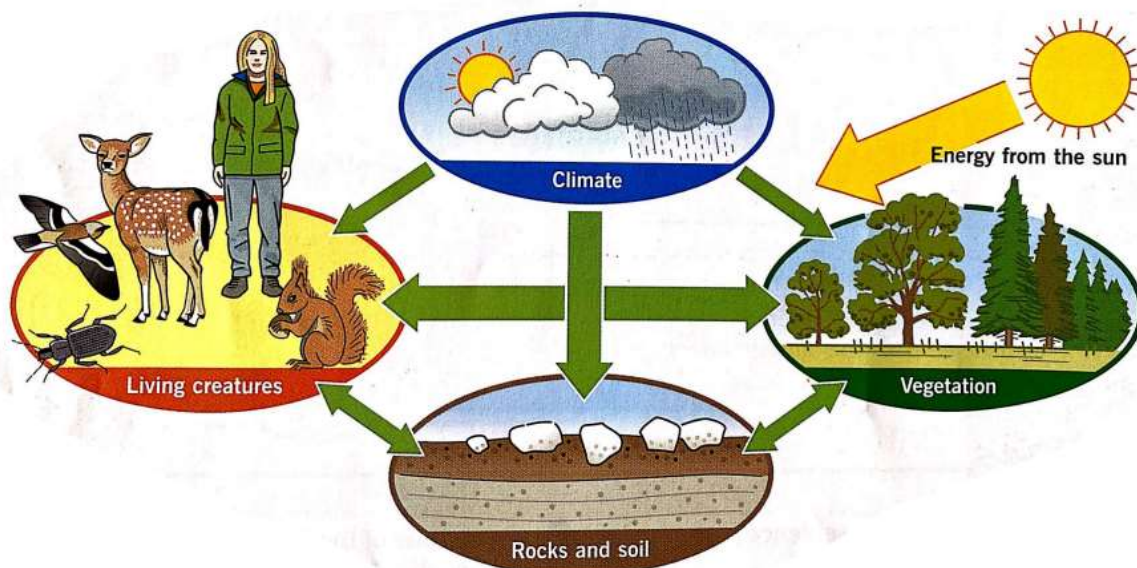
Learning about ecosystems will help you understand our world and appreciate the different types of vegetation and wildlife found across the earth's surface. It will also help you understand why we need to use the earth's resources carefully so that we do not damage or change the environment for future generations.

Learning about ecosystems will help you to:

- Appreciate the world about you
- Develop a concern for the environment
- Learn about protecting wildlife and scenery
- Develop an interest in your surroundings.

An **ecosystem** is a community of plants and animals which interact with each other and with their **non-living environment**. The types of plants and animals that grow or live in an environment depends on factors such as climate, soil, rock type, and relief (the shape of the land i.e. is it flat, or mountainous). Diagram A shows the links between various elements of a simple ecosystem. Notice how the parts are closely related and each affects the others. This is important because if one component changes, then so will the others.

**Diagram A: links in a simple ecosystem.**



Ecosystems can vary enormously in scale. They range from small ponds and hedgerows to whole **rainforests** stretching thousands of kilometres across continents. A very large ecosystem such as a rainforest is called a **biome**. The vegetation in a biome is largely determined by climatic factors such as temperature, rainfall, sunshine and wind. Map A (on the separate sheet) shows some of the world's major ecosystems.

In recent times, ecosystems have been increasingly altered and even destroyed by human activity. In Brazil, for example, more than 20% of the original forest has been cleared for development, while across Scandinavia huge areas of coniferous forest are slowly dying from air pollution called acid rain.

Many people are worried that changes brought about by human activity are irreversible and will cause severe problems in the future.

