

# Ecosystems

**Cross-Curricular Focus: Life Science**



An **ecosystem** is all the things that interact in a specific area, whether they are living or non-living. Some examples of non-living things that support life in an ecosystem are light, air, soil and water. Living things are the plants and animals, called **organisms**, that use those resources.

Each of the specific ecosystems in the world has its own conditions created by the non-living things. These conditions determine what kinds of living things will be able to thrive there. Organisms can only thrive where their needs are being met. Everything in an organism's environment has an effect on it. One ecosystem that allows many different kinds of organisms to thrive is a temperate zone. It is an area where the conditions never become too hot or too cold.

All the living things in an ecosystem are called a **community**. All of one specific kind of organism living in a community is called a population. All the tree frogs in a rainforest community are one population within the community. All the white birch trees are another population within the same community. All the jaguars are yet another rainforest community population.

All living organisms perform certain life processes. They take in nutrients like air, sunlight, water, and food. They use energy from those nutrients to grow and develop. They release energy by doing work and moving. They release waste products. They react to things in their environment. They reproduce, producing offspring, or babies, that are similar to themselves.

Name: **Key**

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

**Actual wording may vary.**

1) What is one example of a non-living thing in an ecosystem? **light, air, water or soil**

2) What are three of the life processes that living organisms do? **take in nutrients, use energy to**

**grow, release energy, release waste, react to**

**their environment or reproduce.**

3) What does population mean in a community?

**one specific type of organism living in a**

**community**

4) When does an organism thrive?r.

**when its needs are met**

5) Why does a temperate zone support many varieties of organisms? **because the conditions**

**are not too hot and not too cold**