1 it's all connected

The world is filled with **living things** and **non-living things**. Plants and animals are living things. Plants need air, water, light, nutrients, space and temperature to survive. Animals need air, food, water, shelter and space. Living things are able to reproduce and create more of themselves. Non-living things do not grow or reproduce.

organism

A single living thing is called an **organism**. An organism is capable of growing and reproducing. A dandelion, a tree, an insect, a frog, a fish, a coyote, a boy and a girl are a few examples of organisms.

it's not alive!

The world is also filled with non-living things. Non-living things are not made up of living cells. A non-living thing cannot grow or create more of itself or reproduce. Sunlight, air, rocks, temperature, water and landforms (hills, valleys, mountains) are all examples of non-living things that are not alive but are important for survival of organisms.

Organisms also need soil to survive. Soil is made from tiny pieces of broken rock (non-living) and small bits of dead plants and animals (living). Soil also has water and air (non-living). Living things (some too small to see without a microscope) live in soil.

Cottontail rabbits are able to reproduce when they're about 5 months old.

A dandelion is one organism with many tiny flowers bunched together. After a dandelion blooms, each of its tiny flowers produces a seed.

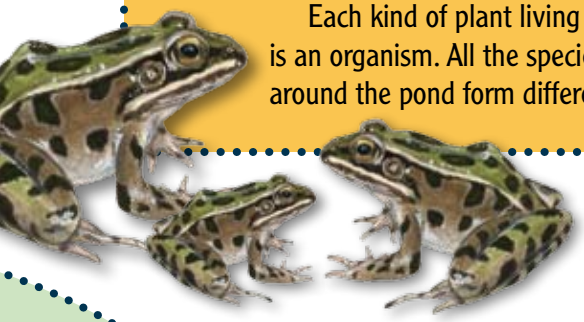
A human is an organism. Populations of humans can be found nearly everywhere in the world.

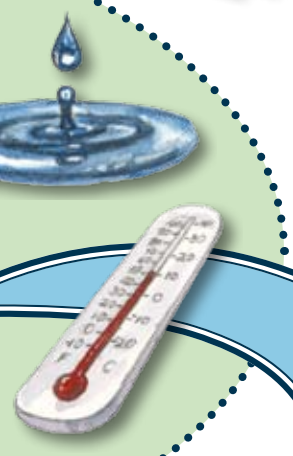
population

A group of the same organisms living together in the same place and at the same time forms a **population**. One leopard frog is an organism. All the leopard frogs living in and around the same pond form a population of leopard frogs.

Each fish is an organism. All the different kinds of fish living in the same pond form different populations of fish.

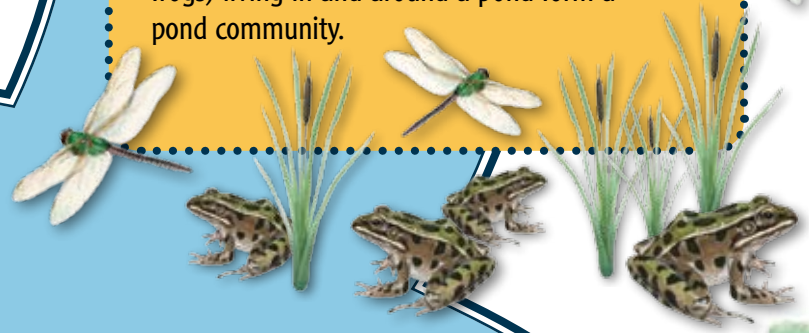
Each kind of plant living in or at the edge of the pond is an organism. All the species of plants living in and around the pond form different populations of plants.





community

A **community** is a group of different populations of organisms. All the organisms must live in the same place and at the same time to form a community. All the different populations of plants and animals (duckweed, cattails, dragonflies, frogs) living in and around a pond form a pond community.



ecosystem

All the populations of plant and animal organisms living together in communities interact with each other, or act on each other, and with the non-living things in their environment. An **environment** is the immediate area around a plant or animal. Living and non-living things that interact in an environment form an **ecosystem**.

summary

Organism—a single living thing

Population—a group of the same organisms living together

Community—different populations of organisms living together

interact with

Non-living things

=

Ecosystem

Populations of bluegill, bass and catfish may be found in many pond ecosystems.

Dragonfly populations play an important role in an ecosystem by eating large numbers of insects.

Female white-tailed deer give birth to one, two or sometimes three spotted young called fawns.