

Date: _____

Name: _____

THE NEEDS OF LIVING THINGS

Key Question: What do organisms need to survive?

In the last lesson you learned that an environment has both living and non-living elements. The biotic and abiotic elements in an environment determine which organisms can live there.

The environment where an organism lives is called its **habitat**. Organisms must live in habitats that meet their basic needs. Some of these basic needs are

- sunlight
- air
- water
- food
- ideal temperature range

Sunlight

Sunlight is a basic need for life. Sunlight heats earth's surface and gives warmth. Sunlight also supplies the energy that makes life possible on earth. Plants and animals need the sun's energy to grow and reproduce.

Plants use sunlight to make their own food. Plants use the sun's energy directly. Different plants need different amounts of sunlight. For example, dandelions grow best in bright sunlight. Ferns grow best in shade. Plants store some of the energy they get from the sun.

Animals get energy from the sun indirectly. Some animals get their energy by eating plants. The energy that the plant stores is passed to the animals. That animal is eaten by a larger animal and the plant's energy is passed on again.

Air

Air is another basic need for life. Air is made of many different gases, including oxygen, carbon dioxide and nitrogen.

The gases in the air are important for living things. Plants use carbon dioxide from the air, along with water and light energy, to make sugars. Plants use carbon dioxide to produce oxygen as well as sugars. The oxygen that comes from plants is very important to life on earth.

Many organisms, including humans, need oxygen to survive. Without the oxygen produced by plants, there would not be enough oxygen in the air for all these organisms.

Water

All organisms need water to live. Plants use water to make food and to grow. Animals use water to digest food and form body fluids.

