

A World of Plants

Plants are essential to life. Without plants, people and animals would not be able to survive. Plants give us food, medicines and shade. We make things from plants, we grow plants as a hobby and plants can even make us feel happy.

Plants provide homes and food to many, many animals. Most importantly, plants provide people and animals with fresh air to breathe.

Plants are found all over the world and they are an important part of our everyday lives.

Did You Know?

Scientists believe that there are almost 9 million different types of plants on Earth.



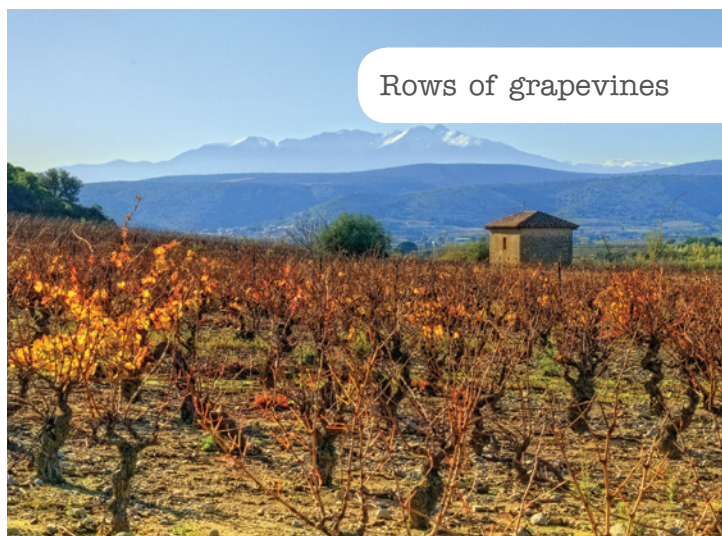
Jacaranda tree



Insect-eating pitcher plant



Field of sunflowers



Rows of grapevines

Vegetation is the name given to all of the plants growing in one area. There are different types of vegetation, including tall trees, small flowering plants, hardy grasses, spiky cactus plants and even plants that grow under water.

The **climate** of a place directly affects the type of vegetation growing there. For example, in a place with a hot, dry climate there are very few plants because the conditions make it difficult for most plants to grow. Instead, in this climate there will be mostly dry, rocky or sandy ground, with only a few plants growing.

You will see many tall, green plants in a place with lots of rain and sunshine. These conditions help plants to grow well.



Cacti can survive where it is hot and dry because they are able to store water inside their stems.



Lush green plants can grow tall and thick where there is plenty of rainfall.

The Importance of Plants

People and animals need plants for many different reasons—without plants in our **environment**, there would be no life.

Plants and the Environment

Plants help the environment in many ways. They produce fresh air, retain and recycle water from rain and prevent land from getting damaged.

Oxygen

People and animals need a gas called **oxygen** to live. They get oxygen by breathing it in from the air. When people and animals breathe out, they release a gas called **carbon dioxide**. Plants play an essential role in ensuring that there is oxygen in the air for all of us to breathe.

Did You Know?

The oldest known living tree is thought to be over 4800 years old! Its exact location in the USA is kept secret to protect it.



Large, tall trees such as these redwood trees help to keep our air fresh.

How Plants Create Oxygen

Plants need sunlight, water and carbon dioxide to make their food. Water is sucked up through the roots; sunlight is absorbed through the leaves; and carbon dioxide enters through small pores in the leaves. Once inside the plant, the carbon dioxide combines with energy from the sun and with water to produce sugar (glucose) and oxygen. The plant uses the sugar for food and releases the oxygen back into the air. This oxygen is what we breathe in to stay alive.

Carbon Dioxide

Too much carbon dioxide in the air is causing the Earth to become warmer and warmer and this creates many problems. Plants help reduce carbon dioxide in the air by taking it in through their leaves. The more plants there are in the world, the less harmful carbon dioxide there is in the air.

