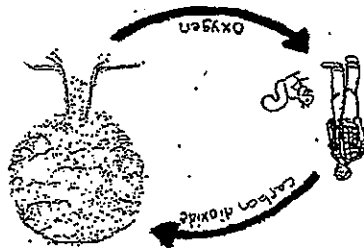


How could building a shopping mall on land that is now a park affect the amount of carbon dioxide in the air?
How could having a lot of trees be good for a busy city with lots of cars and factories?

Think about it!

For millions of years, the carbon dioxide-oxygen cycle stayed in balance. However, human activity has started to change the balance. Years ago, humans started to use machines fueled by wood and coal. Large areas of forests were cut down and deep mines were dug to remove coal from inside the Earth. Factories that burned wood and coal put huge amounts of carbon dioxide into the air each year. Too much carbon dioxide in the air is harmful to animals and humans. Humans do not use wood for fuel much now, but many trees are still cut down for products like paper, and for building homes. Sometimes new trees are planted to replace the ones that are cut, but Earth's forests are still decreasing in size each year.



You may remember that plants make their own food. The process of plants making food is called **photosynthesis**. During photosynthesis, plants must use carbon dioxide, water and sunlight. Photosynthesis occurs in a plant's leaves. Plants take in carbon dioxide gas through their leaves. During photosynthesis plants give off oxygen, which is released into the air. Animals and people get oxygen from the air when they breathe in, or inhale. They release carbon dioxide into the air when they breathe out, or exhale. This cycle of exchanging gases is called the **carbon dioxide - oxygen cycle**. This cycle is important for the survival of all living things.

Carbon dioxide - Oxygen Cycle

Key Vocabulary - photosynthesis, carbon dioxide-oxygen cycle

Life Science - Section 6

5.9D Identify the significance of the carbon dioxide-oxygen cycle to the survival of plants and animals.