

THE SUN: A POWERFUL STAR



The Sun in space

The Sun and the Earth

The Sun is a large, bright star at the center of our solar system. It is much bigger than Earth. In fact, 1 million Earths could fit inside the Sun!

The Earth rotates, or spins on itself. One rotation takes 1 day (24 hours). When the Earth faces the Sun, it's daytime. When it faces away, it's nighttime. At the same time, the Earth also moves in a big circle around the Sun. It takes the Earth 1 year (365 days) to do so.

The Sun gives us light and heat, which we call energy. Plants, animals, and people need the Sun's energy.

Why Is the Sun Important for Animals?

Cold-blooded animals, like reptiles, need the Sun to warm up their bodies because they can't make their own body heat. That's why you often see lizards out on sunny days.

Warm-blooded animals, like mammals and birds, use energy from food to stay warm, but they still need the Sun for heat. Without sunlight, it would be too cold for animals to survive.

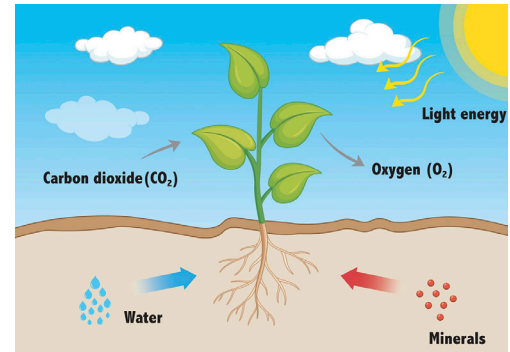


A lizard using sunlight for warmth

Many animals also use the Sun to help find their way. When birds and turtles migrate, they have to travel long distances. One piece of information that guides them is the Sun's position in the sky.

Why Do Plants Need Sunlight?

Plants need sunlight to grow. They use the Sun's energy as part of a special process called photosynthesis. Plants take in sunlight, water, and carbon dioxide in the air, and turn them into the food they need to grow. Humans eat plants and their fruit. Have you ever eaten an apple? That apple couldn't have grown without sunlight. Using photosynthesis, plants also make oxygen. Humans need oxygen to breathe. The Sun helps both plants and humans!



Photosynthesis

How Do People Use the Sun's Energy?



Solar panels turn sunlight into electricity.

People use the Sun's energy in many ways. Sunlight helps us stay warm and allows us to see during the day. Sunlight also helps our bodies make vitamin D. Vitamin D is important because it makes your bones stronger.

Scientists have discovered ways to capture the Sun's energy using special tools called solar panels. Solar panels turn sunlight into electricity that can power lightbulbs, phones, computers, and even cars!

Staying Safe in the Sun

Even though the Sun is important, its light can hurt our skin and eyes if we don't protect ourselves. When you're outside, especially on sunny days, it's a good idea to wear sunscreen, sunglasses, and a hat.

In the summer, remember to spend some time in the shade and drink lots of water!



Protect your eyes and skin from the Sun.