



## Sun: Useful for Plants

### Importance of the Sun for Plants

The Sun is essential for the growth and survival of plants. Plants are autotrophs, meaning they prepare their own food.

#### They use:

- Sunlight → Provides energy.
- Water → Absorbed by roots from the soil.
- Gases (carbon dioxide) → Taken from the air.

Plants convert these into glucose (food).

### Photosynthesis

The process by which plants make their food using sunlight is called photosynthesis.

#### During photosynthesis:

- Plants absorb sunlight using their leaves.
- They take in carbon dioxide from the air.
- They use water from the soil.
- Plants release oxygen into the air.

#### Formula of Photosynthesis:

Sunlight + Water + Carbon dioxide → Glucose (food) + Oxygen  
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### How Do Humans and Animals Benefit?

Plants store solar energy in the form of food. Humans and animals get this energy indirectly by eating plants and plant products.

#### Examples:

- We eat fruits, vegetables, and grains grown by plants.
- Herbivorous animals eat plants, and carnivorous animals eat herbivores, indirectly gaining solar energy.



## Importance of Plants for Life

- Plants release oxygen → Essential for breathing.
- They maintain the balance of oxygen and carbon dioxide in the air.
- Plants provide food → For humans and animals.
- Protects soil → Prevents erosion.
- Keeps the environment cool → Through transpiration.

## Fun Facts

The Sun's light helps plants grow towards it. Without sunlight, plants would die. Leaves appear green because they absorb sunlight and reflect green light. The process of photosynthesis produces most of the oxygen we breathe.

## Conclusion

The Sun is essential for plants to make food through photosynthesis. Humans and animals get energy by consuming plant products. Plants give us oxygen, food, and keep the environment healthy.

