

Photosynthesis

6th Grade

How a plant makes its own food, and what it needs to do it.

Photosynthesis happens in the chloroplasts, using energy from sunlight.

1

TAKE IN CARBON DIOXIDE

Through tiny holes in the leaf called stomata.

2

TAKE UP WATER

Through the roots and up the stem.

3

CAPTURE LIGHT

Chlorophyll in the chloroplasts absorbs sunlight.

4

MAKE GLUCOSE

Light energy rearranges CO₂ and water into sugar.

5

RELEASE OXYGEN

Oxygen is the waste product — which is what we breathe.

THE EQUATION

carbon dioxide + water + light → glucose + oxygen



Respiration is the reverse: it releases the energy the plant stored. Plants do both.