



# Phenomenal Photosynthesis

twinkl



# What Does a Plant Need to Grow?

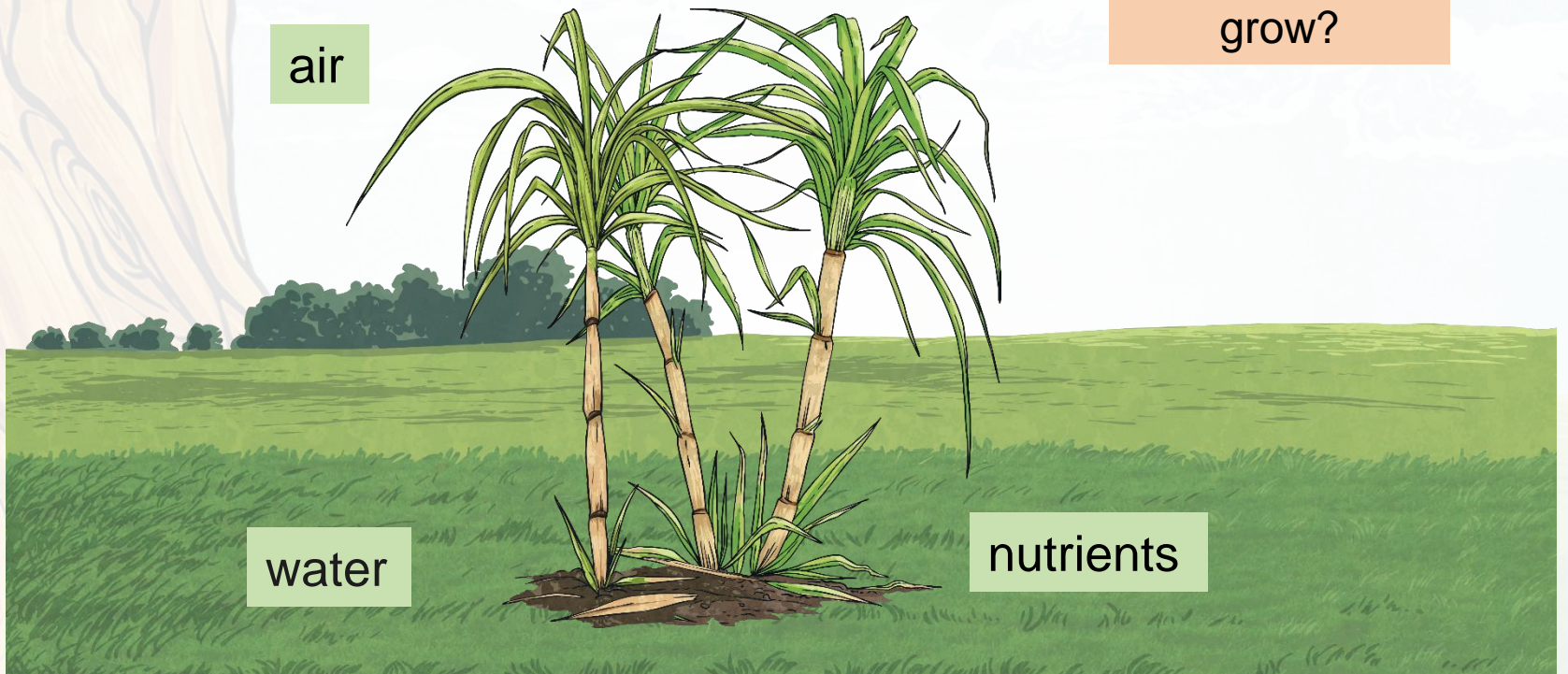
sunlight

How does the plant use these resources to grow?

air

water

nutrients

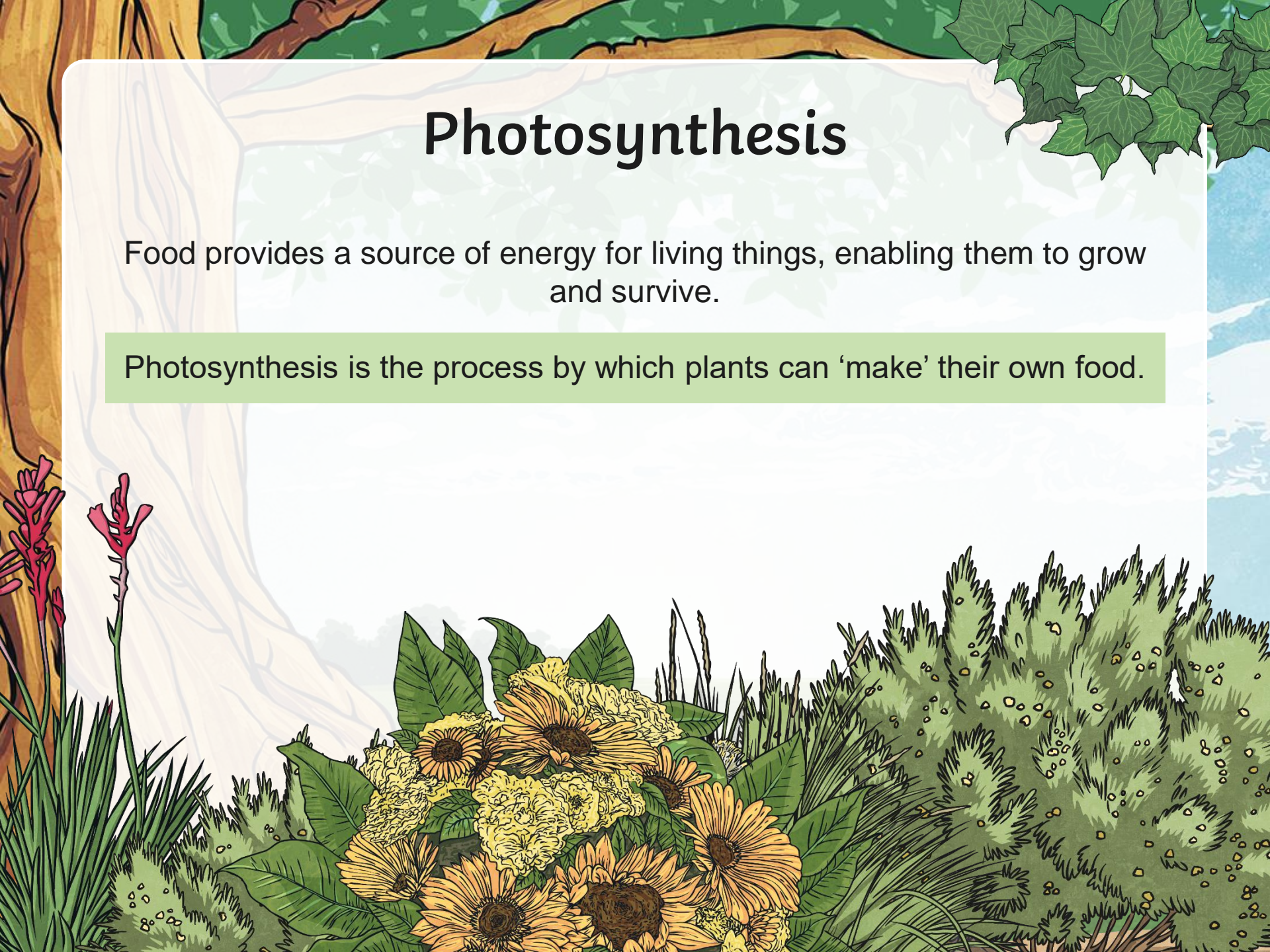




# Photosynthesis

Food provides a source of energy for living things, enabling them to grow and survive.

Photosynthesis is the process by which plants can 'make' their own food.





# Leaves



The leaves on plants and trees are the 'food factories'.

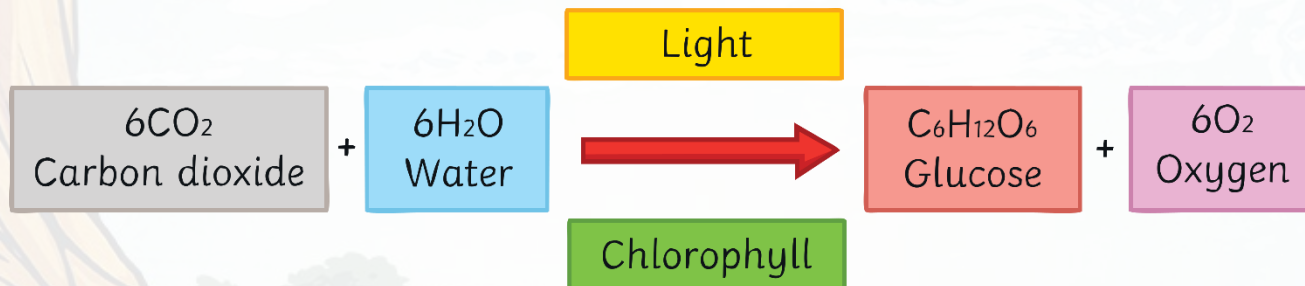
The leaves are green because they contain chlorophyll.

Chlorophyll is essential for photosynthesis because it allows the plant to absorb and then use energy from the sun.

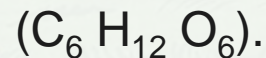
# Carbon Dioxide and Water

Plants take in carbon dioxide ( $\text{CO}_2$ ) from the air.

The  $\text{CO}_2$  is combined with water ( $\text{H}_2\text{O}$ ) using energy absorbed from the sun.

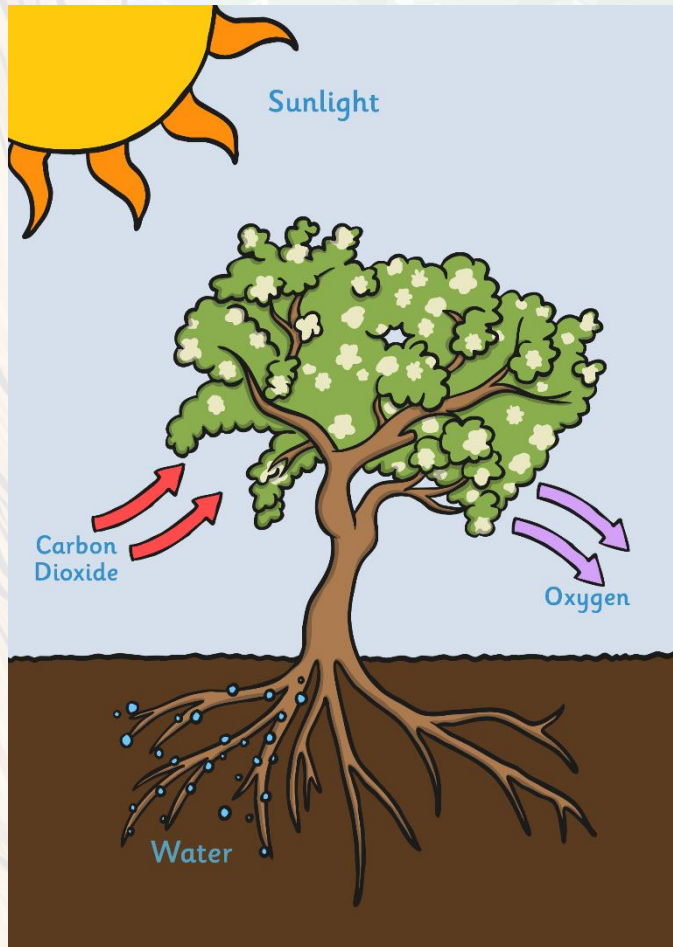


When the carbon dioxide and water is combined, it creates a sugar called glucose





# Glucose



The glucose is used for respiration or converted to a starch and stored.

After glucose is made, the plant releases oxygen ( $O_2$ ) back into the air.

Plants are called 'producers' because they can produce their own food.



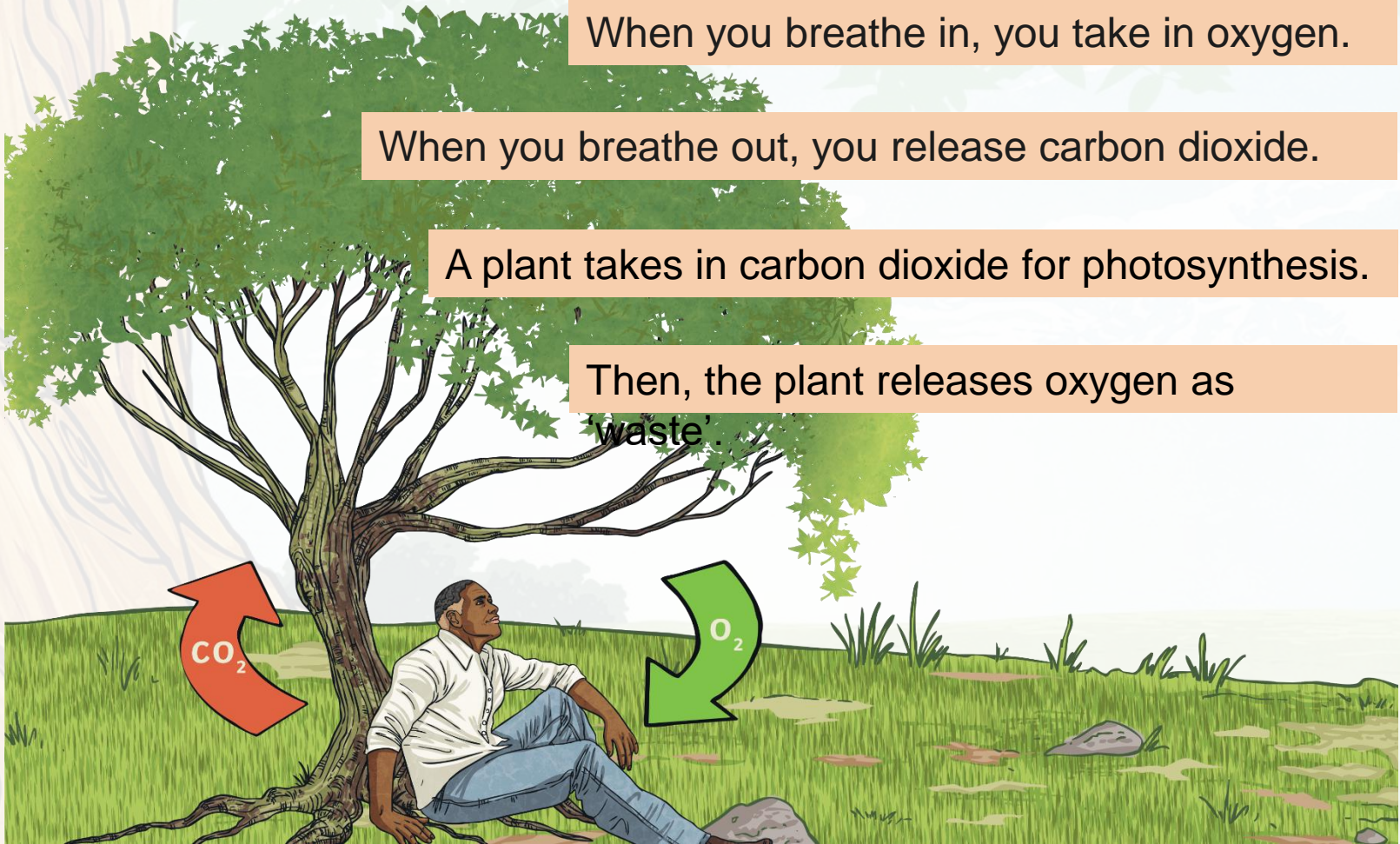
# The Carbon Dioxide/Oxygen Cycle

When you breathe in, you take in oxygen.

When you breathe out, you release carbon dioxide.

A plant takes in carbon dioxide for photosynthesis.

Then, the plant releases oxygen as 'waste'.





# Can You Label the Parts of Photosynthesis?



sunlight

water

oxygen

carbon dioxide

glucose





twinkl