

How Plants Make Food

How to use: Print first for the main practice. Then use the device to repeat activities and save progress.

LEARNING OBJECTIVES

- 1 Explain how plants make their own food through photosynthesis
- 2 Name the three ingredients a plant needs — sunlight, water, and air
- 3 Describe what the plant produces — sugar and oxygen

MINI LESSON

You need to eat food to get energy — but plants don't visit a grocery store! They make their own food using something called photosynthesis.

The three ingredients

- Plants need sunlight (energy from the sun).
- They need water (taken in by the roots and sent up the stem).
- They need air — specifically a gas called carbon dioxide, which enters through tiny holes in the leaves.

Where does it happen?

- Photosynthesis happens inside the leaves.
- Leaves are green because of a special substance called chlorophyll, which captures sunlight.

What does the plant make?

- The plant makes sugar — its food — and uses it to grow.
- It also releases oxygen into the air as a bonus — the same oxygen we breathe!

VOCABULARY

Photosynthesis The process plants use to make food from sunlight, water, and air
e.g. Green leaves perform photosynthesis every sunny day.

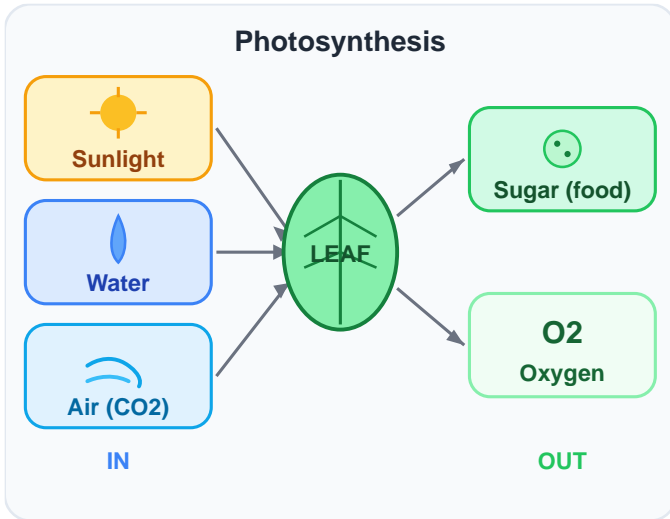
Chlorophyll A green substance in leaves that captures sunlight
e.g. Leaves look green because of chlorophyll.

Sunlight Light energy from the sun that plants need to make food
e.g. A sunny window helps a houseplant grow.

Carbon dioxide A gas in the air that plants take in through their leaves
e.g. People breathe out carbon dioxide; plants use it.

Oxygen A gas released by plants during photosynthesis; animals breathe it
e.g. Forests give off large amounts of oxygen.

Sugar The food plants make during photosynthesis
e.g. Plants store extra sugar in their roots and fruits.



- ### Steps of Photosynthesis
- 1 Sunlight hits the green leaf.
 - 2 Roots send water up the stem to the leaf.
 - 3 The leaf takes in air through tiny holes.
 - 4 Leaf makes sugar and releases oxygen.

! Ask yourself: What three things does a leaf need? What does it make? What gas does it release?

TRACING PRACTICE

Trace each word, then copy it twice on the lines below.

TRACE

photosynthesis

COPY 1

COPY 2

TRACE

sunlight

COPY 1

COPY 2

TRACE

water

COPY 1

COPY 2

TRACE

air

COPY 1

COPY 2

TRACE

oxygen

COPY 1

COPY 2

TRACE

sugar

COPY 1

COPY 2

TRACE

chlorophyll

COPY 1

COPY 2

TRACE

carbon dioxide

COPY 1

COPY 2

Tip: Try tracing 'photosynthesis' slowly — it is a long word, but you can do it!

EXERCISES — PUT IN ORDER

Number these four steps of photosynthesis from 1 to 4 in the correct order.

- Sunlight shines on the green leaf and is captured by chlorophyll.
- Roots absorb water from the soil and the stem carries it up to the leaf.
- The leaf takes in air (carbon dioxide) through tiny holes in its surface.
- The leaf uses sunlight, water, and air to make sugar and releases oxygen.

Number the circles in the correct order.

EXERCISES — MULTIPLE CHOICE

1. What is photosynthesis?

- The way plants drink water through their roots
- The process plants use to make food from sunlight, water, and air
- The way seeds travel to new places

2. Which THREE ingredients does a plant need to make food?

- Soil, seeds, and warmth
- Sunlight, soil, and food
- Sunlight, water, and air

3. In which plant part does photosynthesis happen?

- Leaves
- Roots
- Seeds

4. Why are leaves green?

- Because they are full of water
- Because they contain chlorophyll, which captures sunlight
- Because they grow in the shade

5. What does a plant produce during photosynthesis?

- Water and carbon dioxide
- Seeds and pollen
- Sugar (food) and oxygen

6. Why is the oxygen plants release important?

- People and animals breathe it.
- It helps the soil grow flowers.
- It gives the leaf its green color.

7. What is the FIRST step of photosynthesis?

- The leaf releases oxygen into the air.
- Sunlight hits the green leaf and is captured by chlorophyll.
- The leaf makes sugar for the plant.

8. How does water reach the leaves for photosynthesis?

- It falls from clouds directly onto the leaves.
- The flower collects rainwater and sends it down.
- Roots absorb it from the soil, and the stem carries it up.

9. How does air enter a leaf?

- Through tiny holes on the leaf's surface
- Through the roots underground
- Through the stem from the ground

10. What would happen to a plant kept in total darkness?

- It would grow faster because it rests.
- It could not make food and would stop growing.
- It would make more oxygen than usual.

ASSESSMENT

PARENT / TEACHER CHECKLIST

- Names all three ingredients for photosynthesis — sunlight, water, and air — without prompting.
- Points to the leaf and explains that photosynthesis happens there.
- States that the plant produces sugar (food) and releases oxygen during photosynthesis.
- Places the four photosynthesis steps in the correct order when given the cards on paper.