WHERE DO PLANTS GET THEIR FOOD?

The surprising answer is air and water!



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TODAY WE WILL...

WE ARE LEARNING TO

Explain photosynthesis in simple words

Find where plant growth material comes from

Argue with evidence from investigations

SUCCESS LOOKS LIKE

- ✓ I can name air and water as main sources
- ✓ I can support my argument with evidence

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HOW PLANTS MAKE FOOD

1. Sunlight hits the leaf
2. Roots pull water up stem
3. Leaves breathe in carbon dioxide air gas
4. Photosynthesis makes sugar food plus oxygen

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DID YOU KNOW?

A TREE GAINS HUGE WEIGHT, BUT SOIL BARELY CHANGES!

An early test showed new wood did not come from soil.



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VOTE: HEAVY TREE?

Where did most of a huge tree's weight come from?

- **A** Soil under it
- **B** Water it drank
- **C** Air around it
- **D** Sunlight on it

Vote with your hands, then explain why.

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WATCH: WHAT PLANTS NEED



▶ 1:00 – 6:00

- Listen for air and water as builders
- Spot how soil helps only a little

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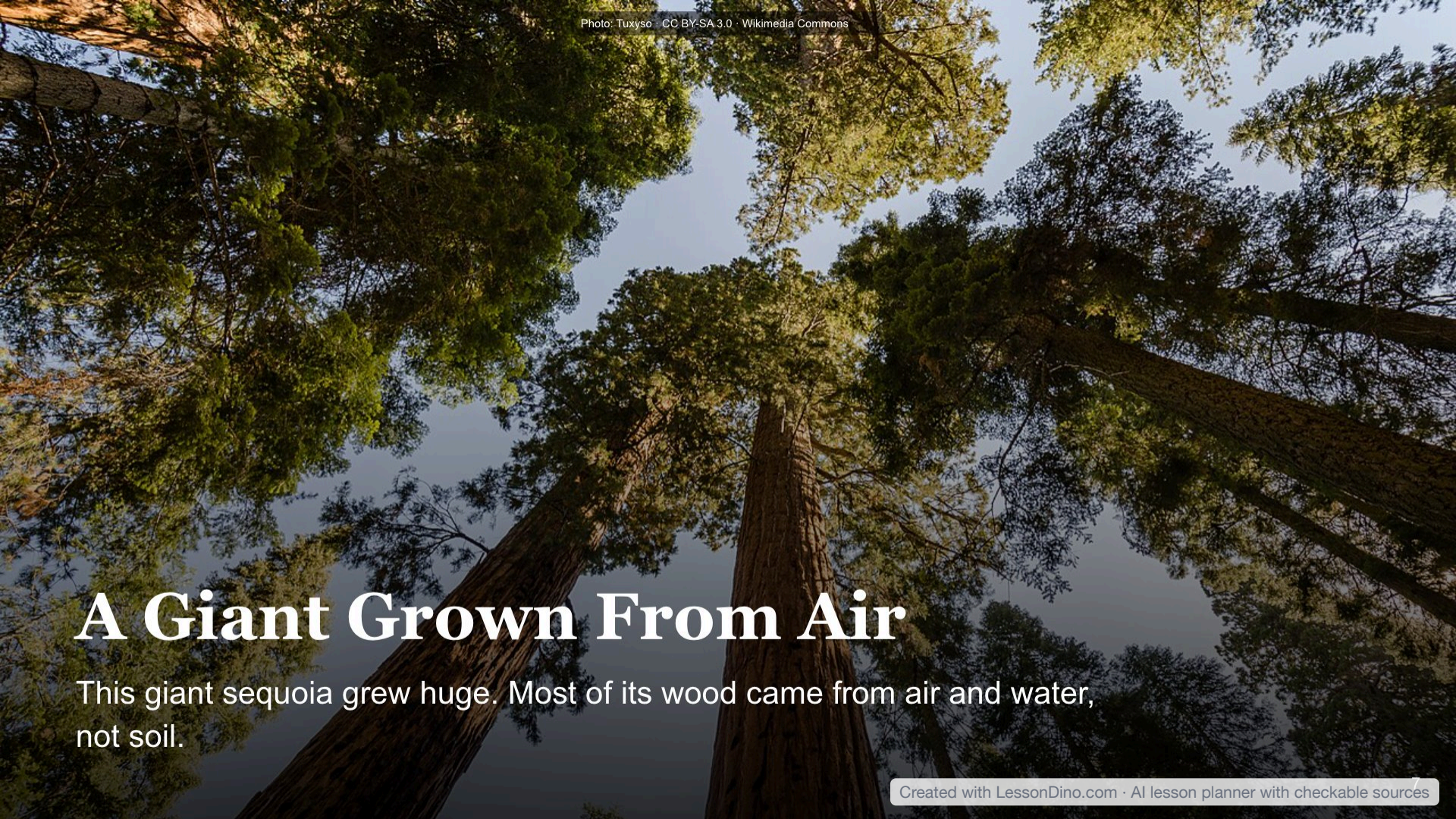


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A Giant Grown From Air

This giant sequoia grew huge. Most of its wood came from air and water, not soil.

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WATCH: HOW PLANTS MAKE FOOD



▶ 0:00 – 5:00

- Watch gas enter tiny leaf holes
- Watch water travel up to leaves

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YOUR TASK

Argue that plants grow chiefly from air and water.

1. Write your claim in one sentence
2. List two evidence pieces we saw
3. Practice saying why it proves your claim

15 min

Groups of 4

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AIR + WATER BUILD PLANTS

1. Carbon dioxide enters through stomata, tiny leaf holes
2. Water travels roots to stem to leaves
3. Sunlight powers making sugar food
4. Soil minerals help health in tiny amounts

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THINK, PAIR, SHARE

If wood mostly comes from air, why must we still water plants?

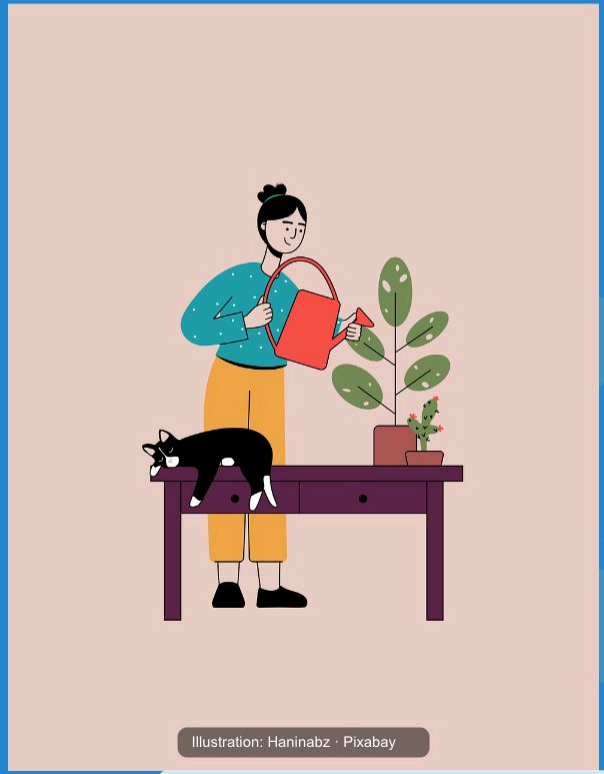


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TRUE OR FALSE?

Plants get most material for growth from air and water.

Most of a tree's weight comes from soil.

Leaves breathe in carbon dioxide for photosynthesis.

Plants make sugar food using sunlight, air, and water.

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