

Directions:

Label the following:

cuticle

upper epidermal cells

stomata

vascular tissue

(xylem & phloem)

guard cell

lower epidermal cells

spongy mesophyll cells

chloroplast

CO₂ coming in

O₂ coming out

(Draw arrows to show what is going in and what is coming out.)

Glue the diagram into your science notebook.
Add a title to the page.

stomata – openings in the surface of a leaf; CO₂ goes in, O₂ comes out

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chloroplasts – the organelles where photosynthesis happens

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palisade mesophyll cells – packed together to expose the most cells to light

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spongy mesophyll cells – have open spaces between them, gases needed for photosynthesis can pass through here

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epidermal cells sometimes grow a waxy coating called the cuticle

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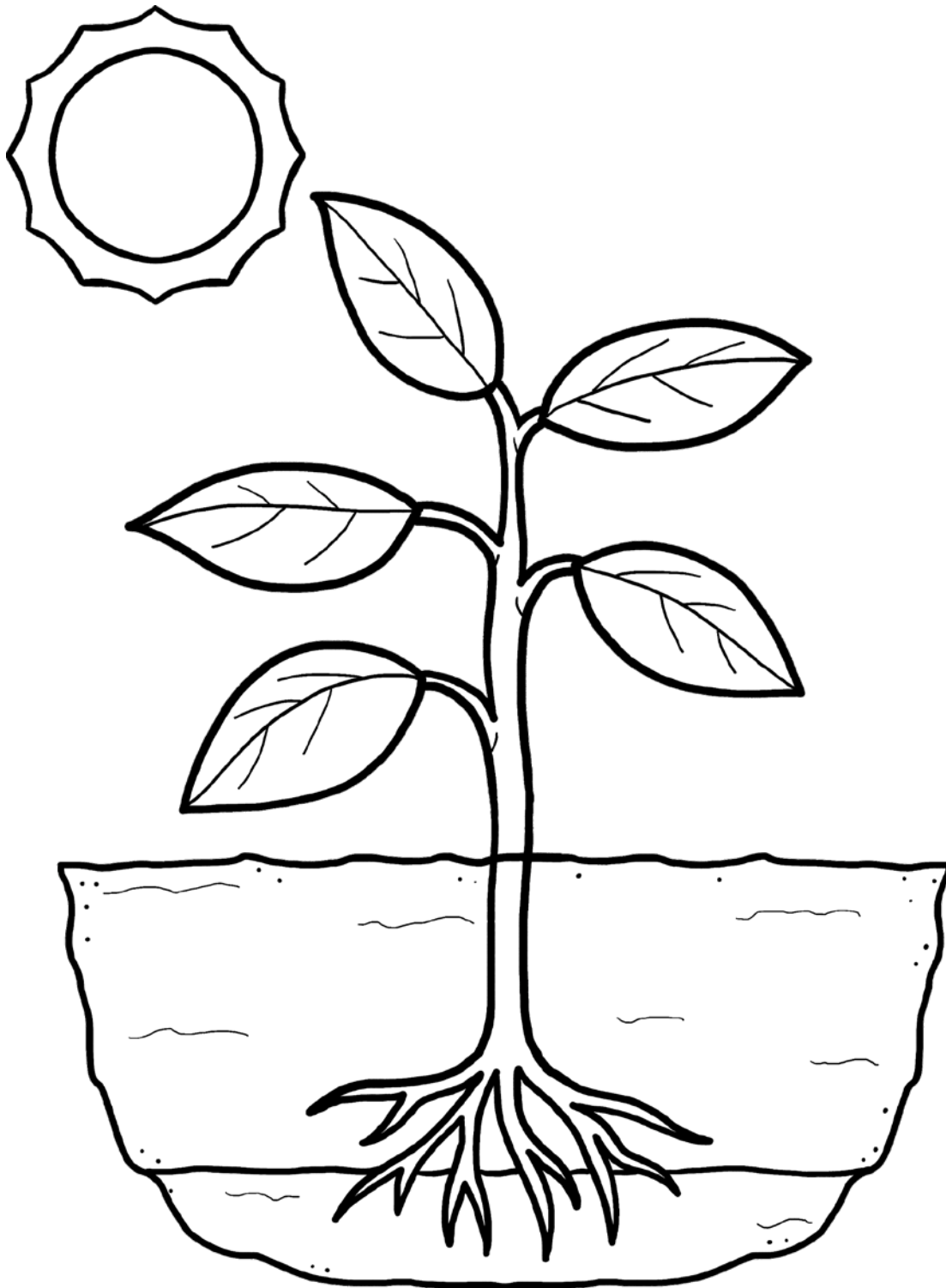
epidermal cells sometimes grow a waxy coating called the cuticle

vascular tissue – the main transport system in plants (includes the xylem & phloem)

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Directions:

Use the plant to show photosynthesis. Label the following:

sunlight

carbon dioxide

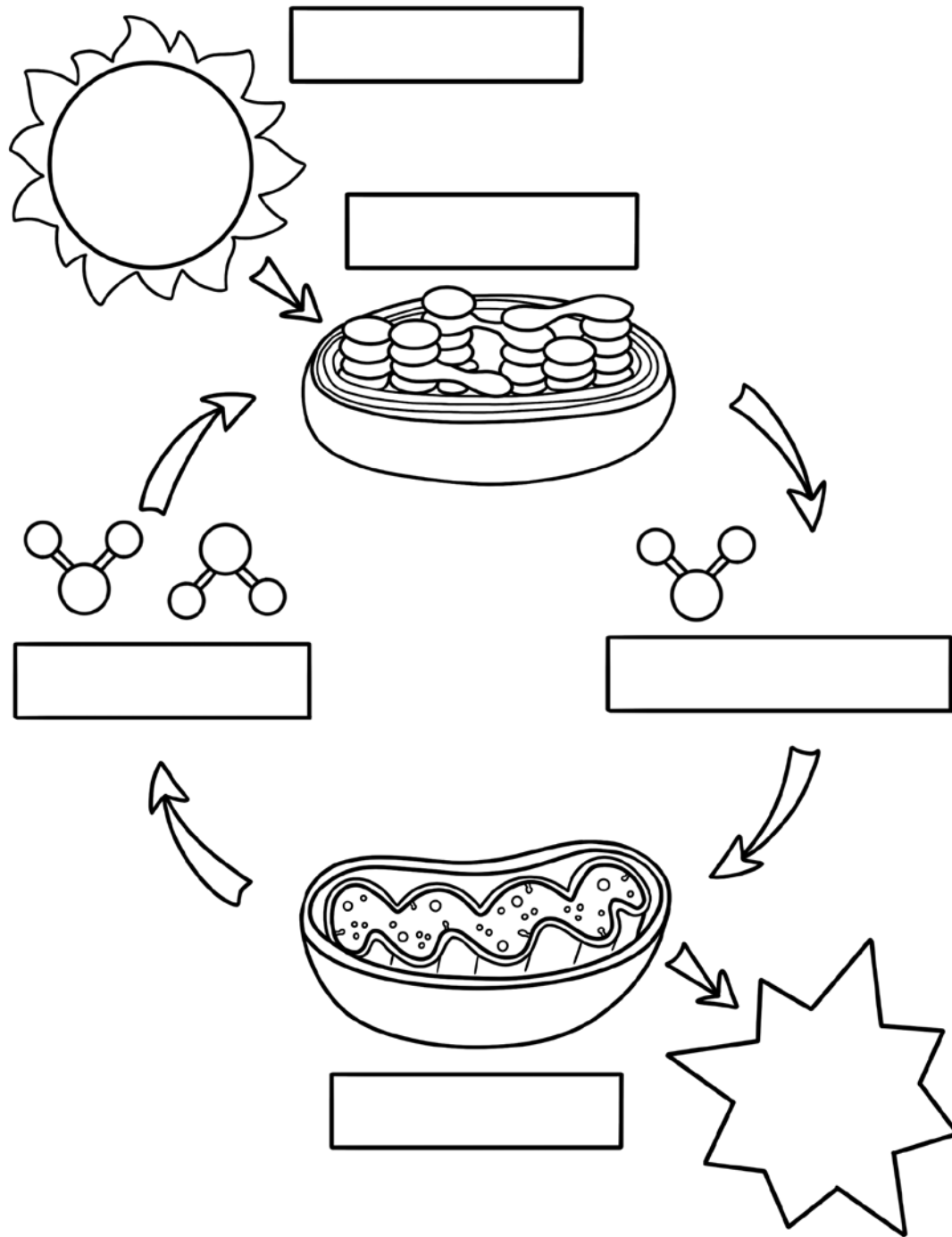
water

sugar

oxygen

Draw arrows to show what is going in and what is coming out.

Glue the diagram into your science notebook. Add a title to the page. At the bottom, explain photosynthesis.



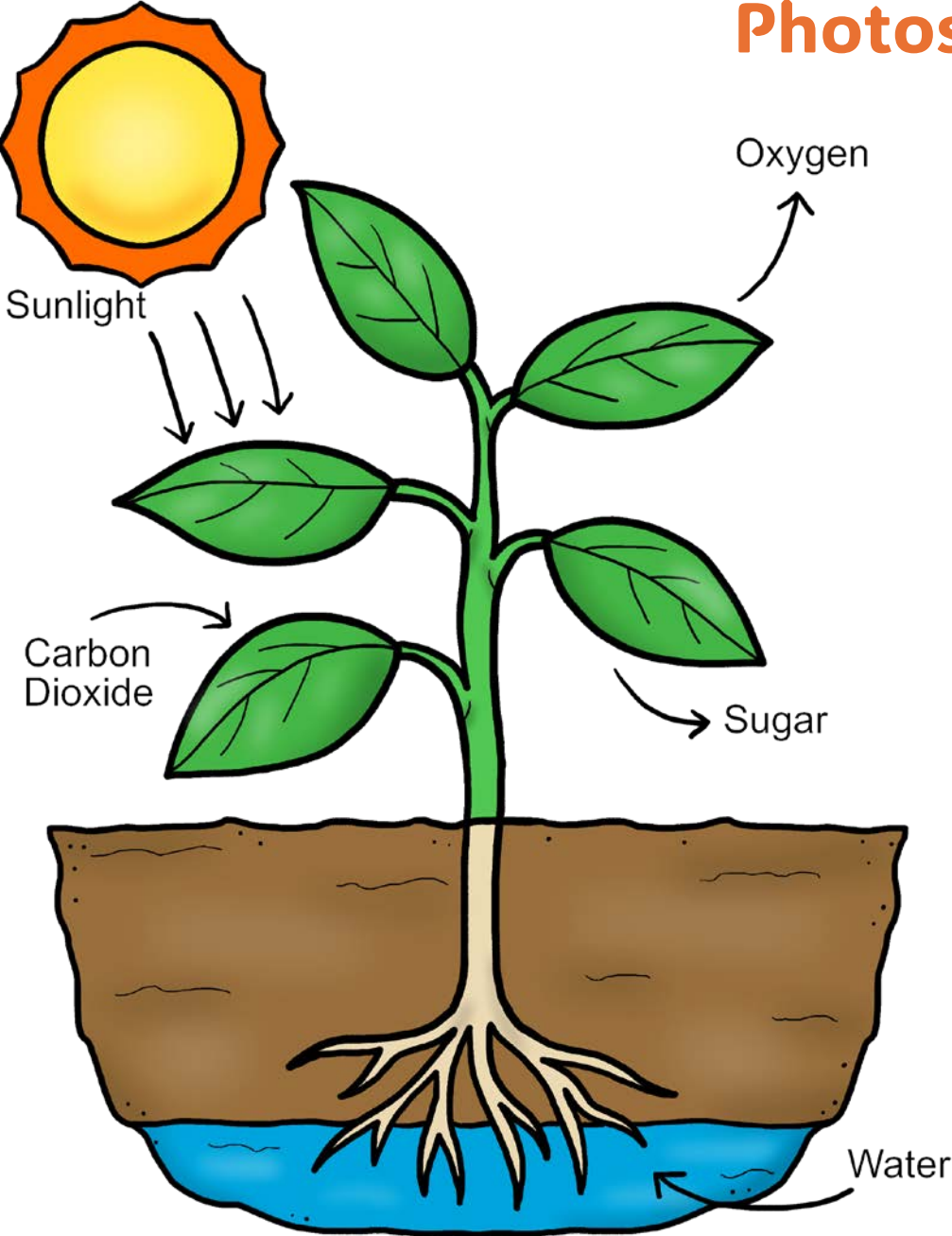
Directions:

Use the diagram to show cellular respiration. Label the following:

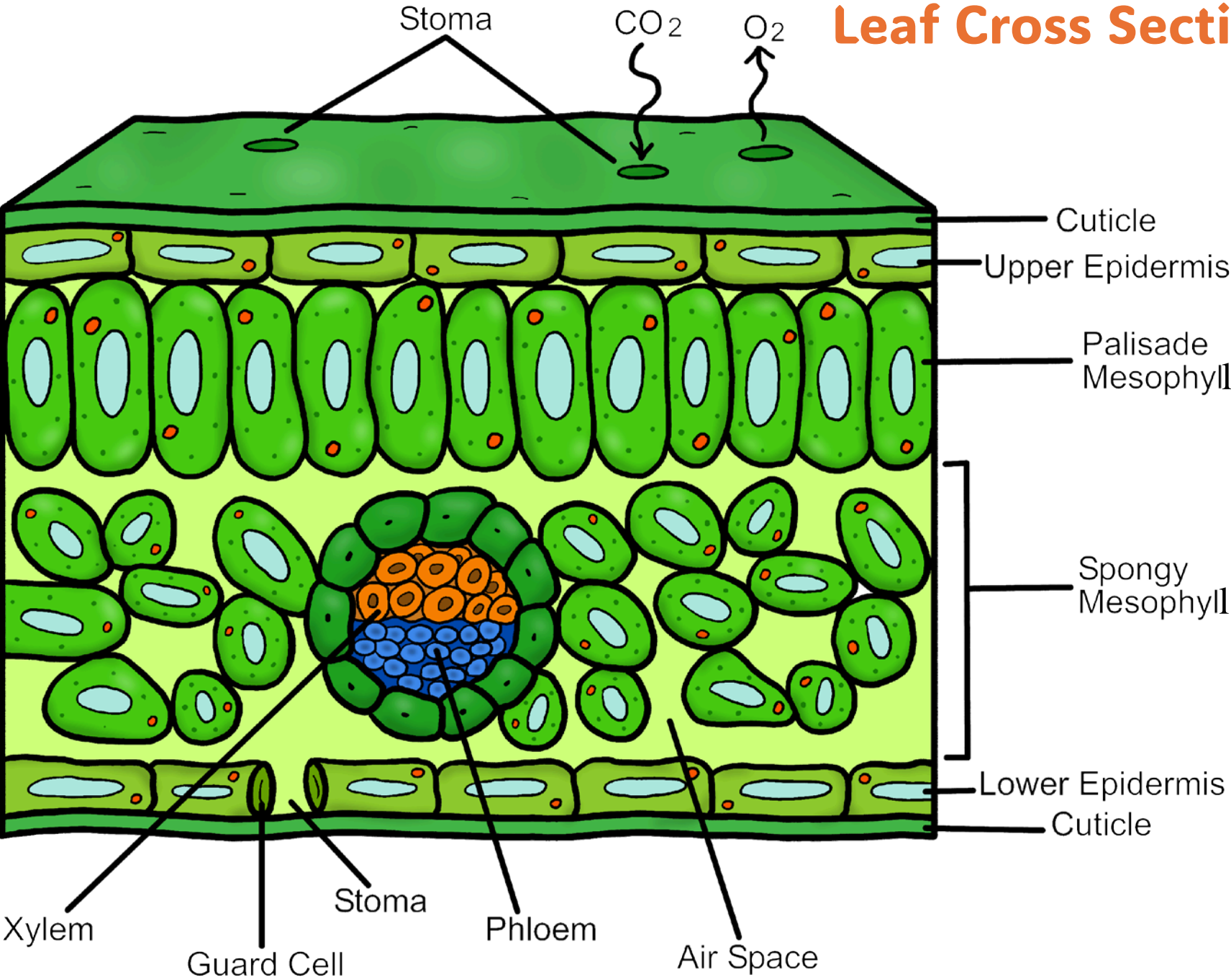
- light energy
- chloroplast
- CO₂+ sugars
- chemical energy (ATP)
- mitochondria
- CO₂+ H₂O

Glue the diagram into your science notebook. Add a title to the page. At the bottom, explain cellular respiration.

Photosynthesis



Leaf Cross Section



Photosynthesis & Cellular Respiration

