

The Stem That Carried a River

A story about stems, xylem,
phloem, and how water
moves upward.

What helps
move water
up a plant?

A Droopy Surprise

Lina and Mateo noticed a tall sunflower drooping sadly after a hot morning.

Lina said the plant looked thirsty. Mateo wondered how water could ever climb all the way from the roots to the flower.

Ms. Chen smiled and said the stem had a secret inside.



The Blue Clue

Ms. Chen placed a white flower in a jar of blue water. “Let’s wait and see what happens,” she said.

They checked back after a little while. The water had crept upward, coloring the stem. In the petals, too—a soft blue!

“This blue path shows how water moves,” Ms. Chen explained. “The tiny tubes inside the stem are called **xylem**. Xylem carry water and minerals up from the roots to the rest of the plant.”



See the blue lines? That’s the xylem—the tiny tubes that carry water and minerals up!


Thanks to the xylem, every part of the plant gets the water it needs to grow.

The Water Elevator


Roots soak up water from the soil. Tiny drops of water slip into the roots like a drink.

Inside the stem are special tubes called xylem. They act like tiny drinking straws or elevators. They carry water up and up.

The water rides the xylem all the way to the leaves and flower at the top!



Xylem
Water moves up through tiny tubes.



Roots
Soak up water from the soil.

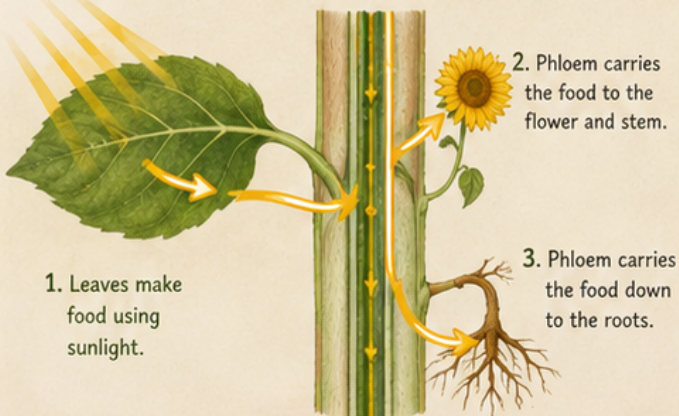
The Food Highway

Lina points to the leaves. “The leaves make food using sunlight,” she says. “But how does that food get to the roots and the flower?”

Ms. Chen smiles. “Great question! The food travels through tubes inside the stem called phloem.”

Phloem is like a food highway. It carries the food from the leaves to the flower, the stem, and the roots so the whole plant can grow.

Phloem: the plant's food highway



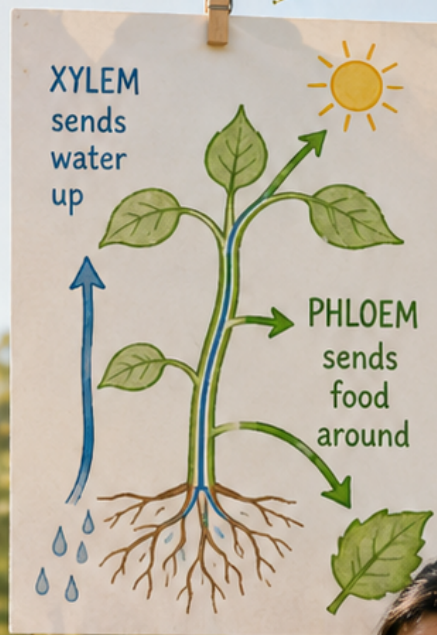
Phloem carries food to every part of the plant.

A Stem Full of Jobs

The sunflower stands tall again! Lina and Mateo sketch what they learned. Ms. Chen smiles.

They realize the stem is more than a stick—it's the plant's busy transportation system. It has important jobs!

Water travels up.
Food travels around.
Together, they help the plant grow.



The stem carries what the plant needs to live and grow.

Science Element

Stems do more than hold plants upright.

Xylem carries water and minerals upward from the roots to the leaves.

Phloem carries food made in the leaves to the rest of the plant.

Together, these tiny tubes help the plant grow, stay healthy, and move what it needs.

Xylem carries water and minerals upward.

Phloem carries food to the rest of the plant.

