

How Do Plants Drink?

LIFE SCIENCES

Get curious

Video/ Slide show

How some trees survive in the desert - let's watch the video.

Talk

The children discuss why plants need water.

The inspiration for the talk will be a film about plant life in the desert. Encourage the children to refer to their own experiences, for example with plants grown at home.

Do all plants need water?

How do trees cope in the desert?

How do you know that plants need water?

Do plants need food?

How do they get their food?

What do they need water for?

Get going

Conclusions

How does water get from the roots to the top of a tree?

Plants mainly draw water from the soil. The water makes its way inside the plant through its roots. How is the water distributed inside the plant? Encourage the students to make hypotheses, which they will have a chance to verify in experiments later on in the lesson.

Observing

Is water in a glass flat?

Encourage students to make careful observations and draw conclusions

Why does water in narrow vessels rise upwards on its own?

Experiment

The children experiment once more with capillary action.

This time, the students transfer water from a full jar into empty cups using various materials, e.g. sponges, paper towels, etc.

Talk

How did the water make its way from the full vessel into the empty cups?

The children discuss the problem in teams and then share their observations in a class discussion.

Observing

With the help of a microscope, a magnifying glass or with the naked eye the students observe a plant stem that has been cut through.

Can we see the small tubes along which the water is transported inside the plant?

Can the effect we observed earlier be used by plants?

Summary

Ask questions and let children explain.

Do all plants need water? Why/Why not?

How does water make its way up plants?

Get practicing

Experiment

Project work – prove that plants take in water.

Based on the facts known to us, we conclude that plants need water to live. However, how can we prove that plants do indeed take in water? This will be the task of the project work. The students work in teams.
