

## B1.2 Water transport in plants



Your mother asks you to water the plants in your apartment. You reason that it probably isn't so easy for the water you pour on the soil to move into the plant. The water would have to flow from the soil below to the plant above. That seems odd to you.



**How does the water from the soil end up in plants?**



**Write down your ideas and guesses:**

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**You need the following for the experiment:**

- ☐ 2 drinking glasses of the same size
- ☐ 5 drops of ink
- ☐ 1 paper napkin
- ☐ 1 pipette
- ☐ Water (one glassful)



Required materials.

**How to set up the experiment:**

Lay out all the materials as shown in the photo.

1. Place the two glasses right next to each other.
2. Fill one glass with water and leave the other glass empty.
3. Use the pipette to add a few drops of ink to the water, so that you can better observe what happens later.

**How to conduct the experiment:**

1. Roll up the napkin.
2. Place it over the glasses. Each end of the napkin hangs in a glass.  
Important: The end of the napkin that is hanging in the glass of water must touch the water.

**Write down your observations:**

What happens with the napkin? What happens in the empty glass?

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**Evaluate your observations:**

1. After a certain amount of time, compare the water level in the two glasses.  
What do you notice?

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2. Do you now have an idea of how water is transported in plants? Note it down.

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3. Now you know how the water from the soil ends up in plants.  
Write down how this happens.

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**Doing further research:**

1. Cut a flower out of white paper.
2. Now place it in the glass with the blue colored water.
3. Observe what happens and note it down.
4. With the aid of the first experiment, try to explain why the flower changed.