

Teacher input

This is an experiment which will need to be set up first thing in the morning for observations to be made throughout the day. You will see the best results after two hours.

Ask the children how they think plants transport water. Record their ideas.

Explain that the children are going to make water 'walk'. They should set up the experiment in small groups.

Either model how to set up the experiment or give the children the instructions (in the resources pack).

Resources

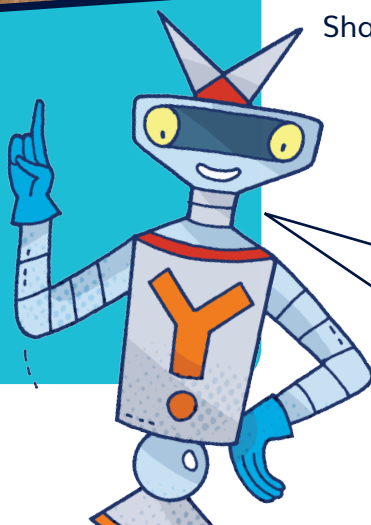
- Yellow and blue food colouring
- Teaspoons
- 3 glasses or transparent containers per group
- Kitchen towel (two sheets per group)

Activity

Encourage the children to use the same amount of water in each glass and the same amount of food colouring (a teaspoon).



Once the experiments are set up, put them somewhere safe in the classroom where the children can observe them.



The water travels through tiny gaps between the kitchen roll's fibres. This is called capillary action. Plants use capillary action to help them move water from the ground up through their stems.

Curriculum for Excellence links

- I can help to design experiments to find out what plants need in order to grow and develop. I can observe and record my findings and from what I have learned I can grow healthy plants in school.

SCN 1-03a

Learning objective

- To explain how water is transported through a plant.

Activity continued

Make observations every hour. These could be recorded by taking photos on an iPad, which can be printed and stuck into science books.

Once the water has 'walked' to the middle glass, ask the children how they think this has happened. Scribe their ideas or ask them to record an explanation in their science books.

Plenary

Either ask children to share their explanation of how water is transported through a plant or, as a class, write an explanation together.

Share with the class Y's explanation below...

ISSUE 30 Cross curricular links

Reading: Wrecking water, pages 12-15; Interview with a geothermal scientist, pages 8-9; Sensational Scientist – Archimedes, pages 28-29; How stuff works – steam engines, pages 22-23.

