

# Watch flowers drink

Make flowers change colour and discover how water moves up through a plant.

## What you need

- 3 fresh white flowers
- Scissors
- 3 containers
- Food colouring
- Water

## How does it work?

Xylem (say zye-lem) vessels are a part of a plant that move water and nutrients from the roots up through the stem and to the leaves. They keep the plant hydrated. During transpiration – the process by which moisture is carried through plants – water evaporating from the leaves draws water from the roots through the xylem vessels. When you add the food colouring to the water, you can see this process in action.



## TREE-MENDOUS

When a tree trunk is cut, you can see rings in it. These are made of a type of tissue called xylem. Each year the tree adds a fresh ring, so you can count them to find out its age.

## TOP TIP

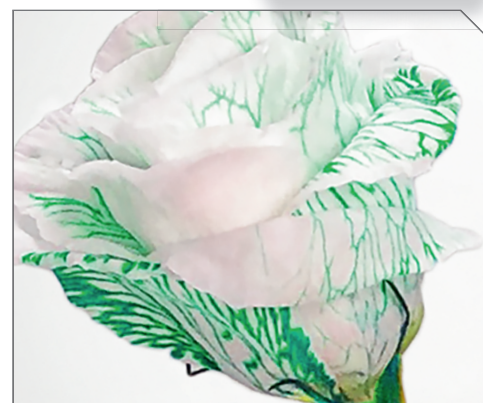
Try doing this experiment using lettuce leaves and celery sticks.



**1** Use scissors to trim the stems so the flowers can stand in the containers without falling over. This activity works better if the flowers aren't fully open.



**2** Add a few drops of food colouring to the three containers, one colour in each pot, then top up with water.



**3** Place a flower in each container. Leave the flowers in a warm room and wait for two to three hours. You should see colour creeping into the petals.