



SCIENCE OUTSIDE THE CLASSROOM

Rainbow Celery

Recommended age group: 6-10 years

You will need:

- 1 bunch of fresh celery with leaves
- Food colouring
- Tall drinking glass

What to do:

Place 1cm of food colouring in the bottom of a drinking glass. Cut a stalk of celery from the bunch. Make sure the cut is straight and that the celery is not dried out.

Place the cut end of the celery stick into the drinking glass.

Wait and see what happens!

How does this work?

Plants draw water up into their leaves because of negative pressure produced as water they have already sucked up evaporates from the leaf surface. It is a bit like sucking water up through a straw, except the sucking effect is produced by water evaporating from the leaves.

You could increase the water uptake by placing the plant in the sun or any warm, light place, which would increase the amount of water evaporated from the leaves!

Note that there is no pumping mechanism in plants, which is why the plants continue to pull water (in this case from the glass with food colouring in it) even after their roots have been removed. The food colouring is simply adding colour to the water so that it can be seen as it travels up the stems of the celery sticks.

If several different food colourings are tested together, the result can be a nice rainbow coloured bouquet of celery.