

into the plant's leaves and **stem** and even into parts of the **flower**.

Obtaining evidence

- Give each group a copy of photocopiable page 34 and tell them that they are going to do an experiment to prove that plants draw up water.
- Explain that each of their containers will have coloured water. One carnation will be in blue water, one will be in red water, and one will have a split stem and be in both blue and red water. The celery will be in blue water.
- Talk to them about fair tests. Ask them what would make the test unfair. Try to make sure they understand about such things as the same amount of water in each container, the same stem lengths, putting the containers on the same windowsill, etc.
- Give three carnations, one of which has a split stem, and a stick of celery to each group. Make sure each stick of celery is the same length.
- Ask them to look at the celery. What do they see in the cut end? They should see the capillary tubes. What do they think they are for?
- Put each plant in a separate container and put them where the children can see what is happening.
- Ask them what they think will happen and record this on their sheets.

Drawing together

- During the day, the plants will draw up the coloured water in a spectacular way. The petals of the carnations should take in some of the coloured water. Let the children look at the cut end of the celery. They will be able to see the blue dye in the capillary tubes.
- Talk about what has happened, making sure that they understand that this process starts, in the plants' roots, which grow underground.



- Ask them to record what they saw and to colour in each of their drawings on the photocopiable page.

Further ideas

This experiment works with carnations. Will it work with other common flowers, such as dandelions, clovers and daffodils?



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Support

Some children will need help in recording on the sheets and it will be useful to revise the simple parts of plants (roots, stems, etc.) with the whole class.

Extension

Using microscopes or lenses children can make an exact model of flowers (a daisy or deadnettle for example) out of modelling clay, learning some scientific names for the parts in the process.

Scientific language

stem – the main part of the plant above the ground that supports the leaf, flower and fruit. Another name is 'stalk'.

flower – part of the plant from which fruit or seeds are later developed.

root – part of the plant found underground.