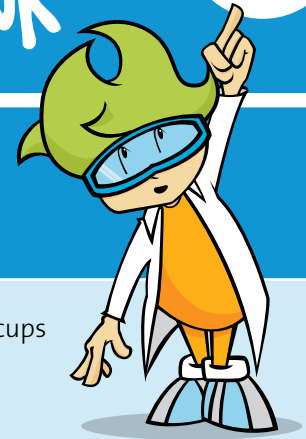




INVESTIGATE HOW PLANTS DRINK



Did you ever wonder how plants “drink” their water?
Plants don’t have any mouth but like us they do get thirsty.
Let’s investigate how plants drink water.

Equipment

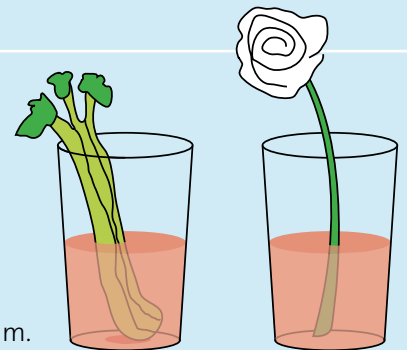
- 1 white
- 1 stick of celery with leaves
- Red food colouring
- 2 glasses or 2 plastic cups
- Water
- A marker

Background Information

Water moves in thin tubes up through plants.

What to do

1. Half fill each glass with water.
2. Add enough red food colouring to the two glasses of water to make two dark red glasses of water. You now have two glasses of red water.
3. Cut the stem off each plant about 1cm from the end.
4. Place the celery stick into one glass of water as in the diagram.
5. Place the white carnation into the other glass of water as in the diagram.
6. Mark the level of water in each glass with your marker. Leave the two glasses for a day or two on a shelf. Regularly check the glasses to see what is happening. What do you think will happen?



What happens?

The carnation’s flowers turn red. Also you will see thin red lines of coloured water running the length of the celery stalk. You will also see red in the leaves of the celery. The level of water in both glasses will have dropped.

Why?

This is because the coloured water from the glasses has moved up through the thin tubes in the plants (*you can see these in the celery*).The water is then transported around the petals of the carnation and leaves of the celery. Ask an adult to cut through the celery stick. You will see the inside of the thin tubes marked red. If you have a magnifying glass use it to look at the where you cut the celery.

Challenge

Can you make a white carnation multicoloured? (*Hint: Ask an adult to split part of the stem down the middle. Use two glasses of different coloured water side by side.*)

Joke

What’s bright orange and sounds like a parrot? A carrot!