



## Walking water science experiment

Level 2

Do you know how to make water walk? Practise your reading in English with this science experiment.

## Reading practice



### Preparation

Match the words with the definitions.



an experiment

a very small amount of liquid

food colouring

the natural force that makes things fall to the ground

a drop

a scientific test to see if something works

to flow

something you add to food to give it a different colour

gravity

to give a plant or animal what it needs to grow

fibres

the part of a plant that grows under the earth

roots

to move in one direction

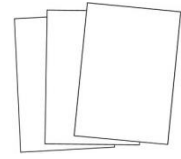
to feed

the thin threads that form a material



## Reading text

Read the science experiment.



## Science experiment: Walking water

Try this science experiment to make water 'walk'. You can even make rainbow colours!

### Before you start

Ask an adult if you can do the experiment.

### What you need

- three empty glasses
- water
- food colouring
- paper towels



### How to do it

1. First put a few drops of yellow food colouring in a glass.
2. Then put a few drops of blue food colouring in another glass.
3. Next fill the glasses with water.
4. Put an empty glass in the middle.
5. Fold a paper towel to make a long thin piece.
6. Put one end in the yellow water and the other in the empty glass.
7. Then fold another paper towel.
8. Put one end in the blue water and the other in the empty glass.
9. Wait for an hour or two.
10. Finally look at the glass in the middle. What can you see?

### How does it work?

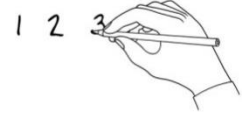
This experiment works because of something called 'capillary action'. Usually water only flows down, because of gravity. But as the spaces between the fibres of the paper towel are so small, the water actually moves up, against gravity!

### Did you know?

Trees also use capillary action. Water moves up the roots to feed the whole tree!

### Now try ...

Did you see green water in the middle glass? That's because yellow and blue make green. You can do the experiment using different colours. Try using seven glasses to make a 'rainbow'!



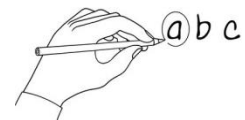
1. What's the order?

Put the sentences in order.

- |   |   |
|---|---|
|   | Put an empty glass in the middle.                                 |
|   | Wait for an hour or two.  |
| 1 | First put a few drops of yellow food colouring in a glass.        |
|   | Finally look at the glass in the middle. What can you see?        |
|   | Then put a few drops of blue food colouring in another glass.     |
|   | Fold a paper towel to make a long thin piece.                     |
|   | Put one end in the blue water and the other in the empty glass.   |
|   | Put one end in the yellow water and the other in the empty glass. |
|   | Next fill the glasses with water.                                 |
|   | Then fold another paper towel.                                    |

2. True or false?

Circle true or false for these sentences.

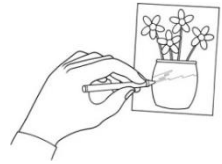


- |  |             |              |
|--|-------------|--------------|
| a. You can make rainbow colours with this experiment.              | <u>true</u> | <i>false</i> |
| b. Ask a friend before you start the experiment.                   | <i>true</i> | <i>false</i> |
| c. You need three glasses, water, food colouring and paper towels. | <i>true</i> | <i>false</i> |
| d. Wait a minute or two for the water to move.                     | <i>true</i> | <i>false</i> |
| e. Water usually flows down, because of gravity.                   | <i>true</i> | <i>false</i> |
| f. Trees don't use capillary action.                               | <i>true</i> | <i>false</i> |
| g. Blue and yellow make purple.                                    | <i>true</i> | <i>false</i> |
| h. You can use different colours to do the experiment.             | <i>true</i> | <i>false</i> |



Write and draw!

Do you like science? Do you know any other experiments? What experiments would you like to do? Draw a picture and write about it!



A large rectangular area for drawing and writing, containing several horizontal dotted lines for text.