

HOW DO PLANTS GET WATER?

You Will Need:

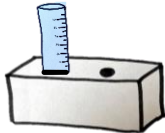
- Scissors
- Cardboard test-tube rack
- 50 mL Tube
- Plastic Pipette
- Water
- Food Colouring
- A White Flower



1. Pour water into the 50 mL tube until it reaches the 30 mL mark.



2. Put the 50 mL tube in the test-tube rack.



3. Using the pipette, add 5-6 drops food colouring to the tube of water.



4. If the flower is too big, trim the stem of the flower so that it fits in the 50 mL tube.



5. Place the stem of the flower into the 50 mL tube of coloured water.



Watch What Happens!

? What do you notice after 1 hour?

? What do you notice after 24 hours?

What Happens?

The petals of the flower begin to turn the same colour as the food colouring.

- After 1 hour you may start to notice a small amount of colour appearing on the petals of the flower.
- After 24 hours the colour should become deeper and more visible.

Why does this happen?

The water is carried up to the flower petals through the stem of the plant. The water is dyed with the food colouring, and this is what causes the petals to change colour.

Plants, like all living things, need water to survive. Water travels up tiny tubes called **XYLEM** (sounds like 'ZI-LEM') through a process known as **CAPILLARY ACTION**. This allows the plant can draw the water up through the stem.

What do I need this for?

Plants use water, **CARBON DIOXIDE**, and energy from the sun in a process known as **PHOTOSYNTHESIS** to create food. This is why water is so important for a plants' growth and nutrition.

Did you know?



Plant roots have many tiny hairs on them. These root hairs allow the plant to absorb water from the soil.