

# Silchester School's WOW Week for Science



25th - 28th February 2025





## Experiment 1: Colourful Flowers

We followed the instructions below and discussed predictions of what we thought might happen and why... We excitedly waited a few days, but finally we saw that the stem had sucked up the colourful water and made the petals coloured too!



**WALT:** observe and describe how seeds and bulbs grow into mature plants

Plant a variety of seeds and bulbs in different pots.

Water the plants regularly and note their changes.

Describe the growth stages of the plants using drawings and writings.

### Colourful Flowers Science Experiment



#### Method

1. Cut the flowers to have short stems (the shorter the stem, the quicker the results will be seen). It is best to cut the stems on an angle to give a greater surface area for the coloured water to enter through.
2. Add water and a generous amount of food dye to each vase.
3. Place a flower in each vase.

**You will need:**  
white flowers with stems  
water  
coloured food dyes  
short vases or glasses

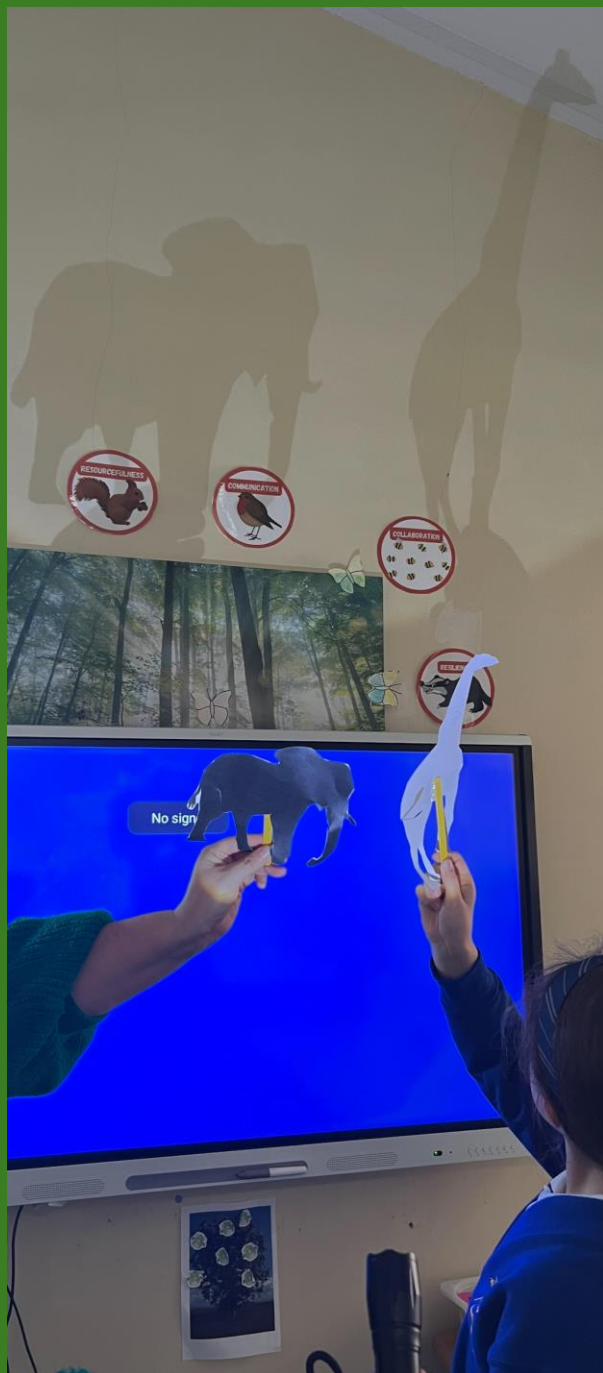
**Teacher tip:**  
This process is called 'xylem action' and it is when the plant sucks water up through its stem to feed their cells and make them grow. Because the water is coloured, the petals of the flower end up coloured too.



an hour  
the colour









We each planted a bulb to see how it would grow over time!











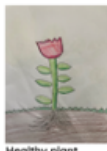


### Experiment 3: A Fair Test - What is needed to make a plant grow healthily?

First, we explored what things plants need to stay healthy: water, warmth and light. We then discussed what a healthy plant and an unhealthy plant might look like and drew one of each.

What does a plant look like when it is healthy?

A healthy plant grows tall and strong. It can have green, shiny leaves or bright coloured flowers or fruit.



Healthy plant

b) If a plant does **not** have water, light or warmth, what might it look like?

A plant without water, light or warmth can turn brown, dull and go droopy (wilt).



Unhealthy plant

After that, we each got our own pot and put in some cress seeds. However, we then wanted to find out what happened if some of the cress seeds didn't get one of the three things they need. We predicted what might happen and used our knowledge that we had just learnt from our previous discussion about healthy plants and unhealthy plants. We then made a fair test so that each house group had different conditions to see what would happen.

	Group A	Group B	Group C	Group D
water	✗	✓	✓	✓
warmth	✓	✗	✓	✓
light	✓	✓	✗	✓

RESULTS COMING SOON...!







# THANK YOU!

Huge thanks to:

The **staff** who have worked hard to facilitate such an enriched week,

**Mrs Forrester** for organising the week,

**And AWE STEM Ambassadors** for running the Aerodynamics Workshop,

Our **PTA** who funded the additional resources and experiences,

And of course, to our wonderful **children** who have loved throwing themselves into the world of Science, Technology, Engineering and Mathematics.