

# SCIENCE

This half term we are going to learn about **Plants!**

This week we will focus on **how water is transported in plants.**

**Key words: transport, stem, evaporate, compare, temperature, leaves, flower, observe, prediction, conclusion.**

## Water Transportation:

- The process of water transportation is the way water moves through a plant.
- The roots absorb water from the soil.
- The stem transports water to the leaves.
- Water evaporates from the leaves.
- This evaporation causes more water to be sucked up the stem.
- The water is sucked up the stem like water being sucked up through a straw.

## Activity

**Test yourself:** Cover up the notes above. Can you explain the process of water transportation to a parent/carer/brother/sister? Use this diagram to help!

### Investigations:

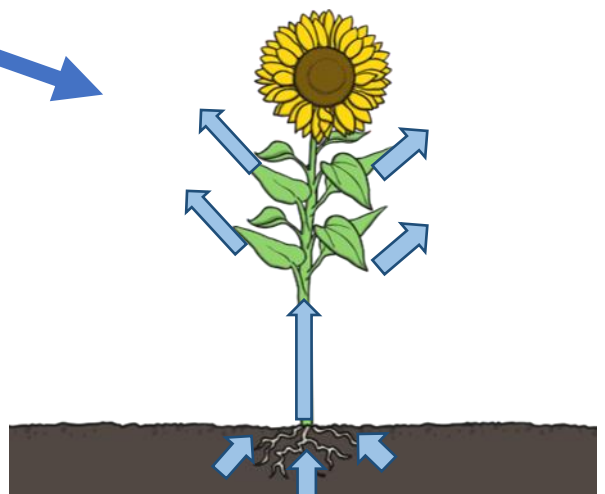
Scientists carry out investigations to find things out and answer questions.

There are lots of different ways to find things out, such as fair tests, comparative tests, exploring and observing, finding patterns or sorting and classifying.

**You are going to carry out an experiment to observe (see) the process of how a plant sucks up water.**



**\*Parents/carers – if you don't have the resources to do this experiment please don't worry, a discussion about it is ok too!\***



1. Make your **predictions**: what do you think will happen?
2. **Carry out the experiment**: Place one/several stalks of celery into a glass of coloured water (use food colouring). Cut off the bottom of the stalks so water can get in more quickly. Leave them overnight.
3. Draw **conclusions**: what did the experiment show? The experiment demonstrates osmosis, the process which plants use to get water from their stem all the way through to the leaves. Cutting the outside layer away you can clearly see the xylem of the stalk -the tiny tubes that water travels through.



## Activity

You could create a model of a plant. The stem is represented by the paper towel roll, the straws are the xylem (the tubes the water travel up inside the stem) and the plant tissue is shown with the plastic. You could add a 'green outside layer' with leaves!