

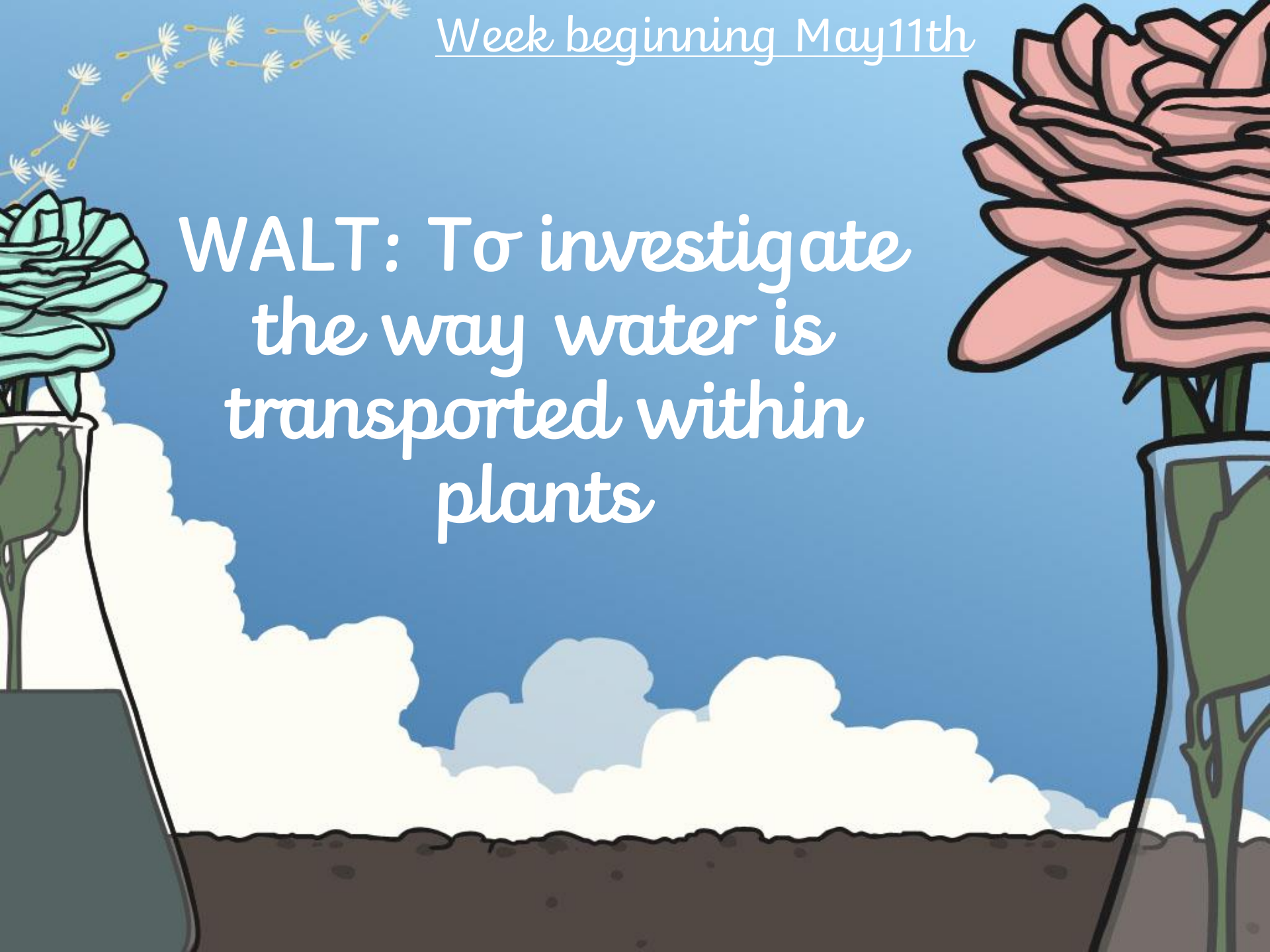
Moving Water



twinkl

Week beginning May 11th

WALT: To investigate
the way water is
transported within
plants



Start by watching the video:

<https://www.youtube.com/watch?v=Rz7zmSIvrtA>

How does water get from the roots
to the leaves?

TEACH
Teach



0:05 / 2:01



How does water get from the roots to leaves of a plant? | Primary Biology - Plants

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.

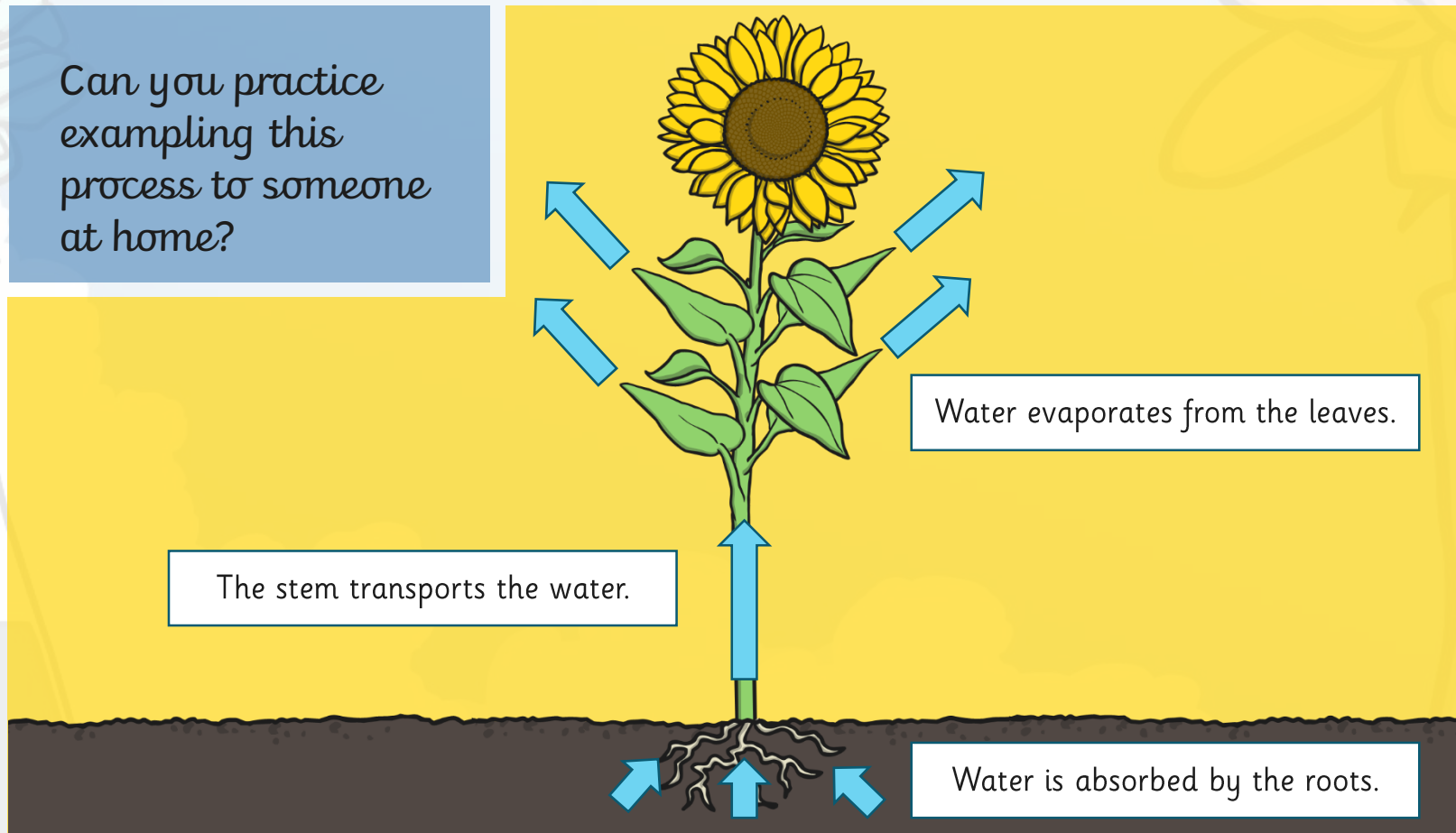
This evaporation causes more water to be sucked up the stem.

The water is sucked up the stem like water being sucked up through a straw.



Water Transportation

Can you practice
examplifying this
process to someone
at home?



What do you think?

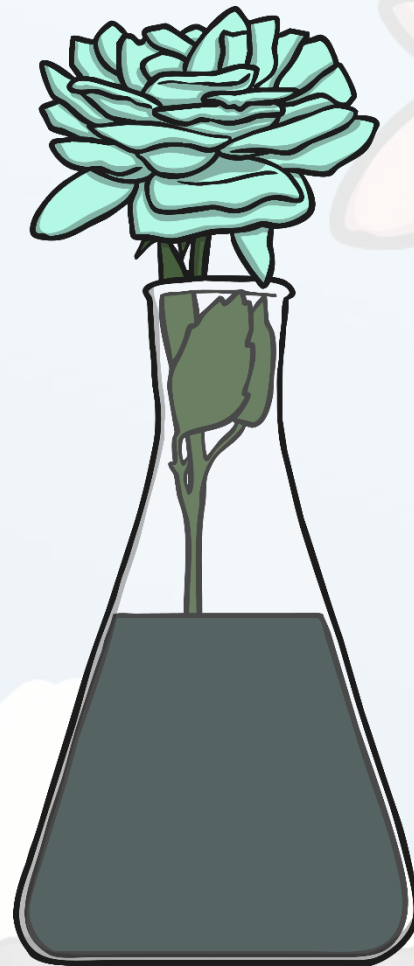
Look at the flower. It started off as bright white. What has happened to it?



Food colouring was added to the water.

The stem sucked up the coloured water, then transported the water to the flower.

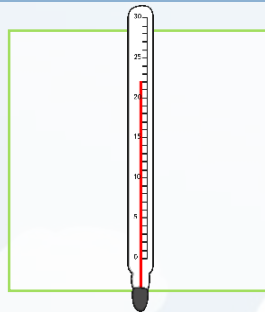
The colour showed up in the petals.



Transportation Investigation

If you put white flowers in coloured water at different temperatures, you could watch their petals to see which flowers change colour the fastest.

The flowers that change colour first have the quickest speed of water transportation, as the stem is transporting the coloured water the fastest.



Can you think of places around your home that are different temperatures?

Think of a hot place, a place that is at room temperature and a cold place.

Task

- Create a cartoon strip explaining the process of water transportation in plants. Use the steps below to help you. If you would like to try the experiment the steps are on the following slides.

1. The roots absorb water from the soil.
2. The stem transports water to the leaves.
3. Water evaporates from the leaves.
4. This evaporation causes more water to be sucked up the stem.
5. The water is sucked up the stem like water being sucked up through a straw.

If you would like to try at home...

You will be changing the temperature in this investigation

You should keep everything else the same, such as the amount of water in each beaker (100ml), the size of the beaker, the type of flower, the length of the stem and the amount of colouring in each beaker (5 tablespoons).

1. Add 5 tablespoons of food colouring to the water in each beaker.
2. Put one flower into each beaker of coloured water.
3. Place the beakers with flowers in around your home in the different places you decided on. Remember, each place should be a different temperature.



Observing Changes



You are trying to spot which flowers start to change colour the fastest.

You will measure the time it takes the flowers in the different temperatures to change colour.

Decide how you are going to make your observations - how often are you going to check the flowers?

Make sure you keep careful records of your observations.

