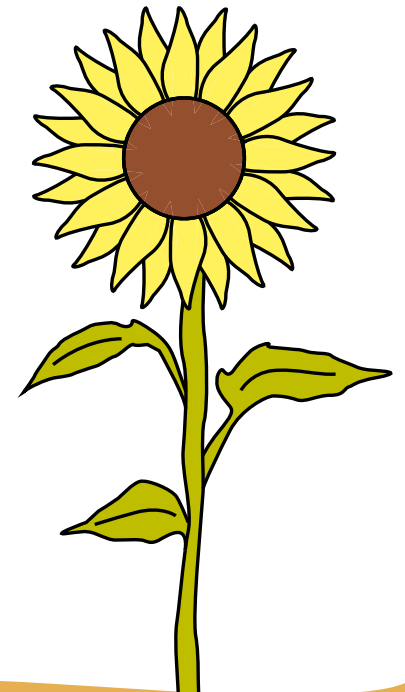


L.O.: To understand how water moves through a stem

How does water move through a stem?

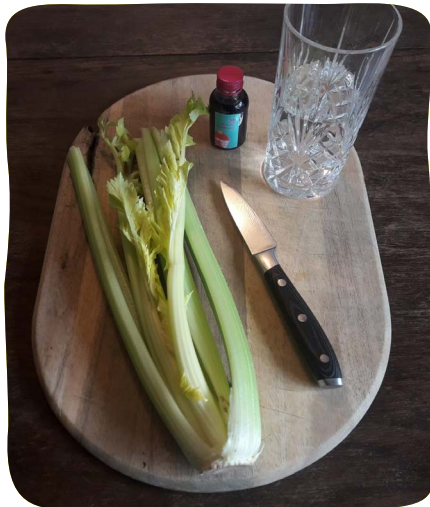
LEARN AT CHESTER ZOO



Experiment to show movement of water through a stem

You will need:

- Celery with leaves
- Cup of water
- Food colouring
- Sharp knife and cutting board (teacher to use)



Method:

- Cut 2 cm off the bottom of a stick of celery.
- Pour food colouring into a cup of water (that is strong enough to hold the celery). Make sure the solution is quite dark.
- Put the cut end of the celery into the solution and leave for at least half an hour.
- Cut the celery stem about halfway up. Observe the stem closely. What do you think has happened?



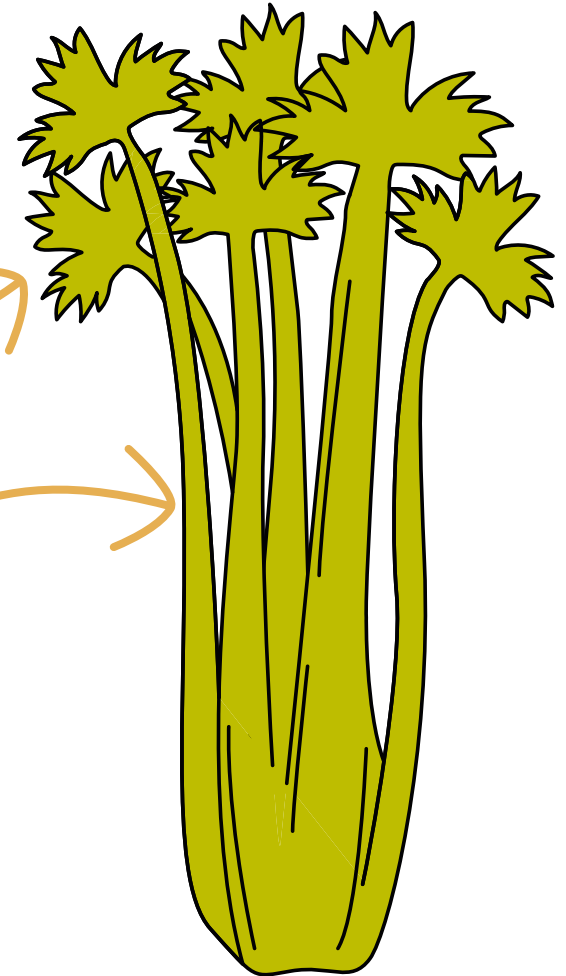
What do you think (predict) might happen?
Draw a diagram to explain this.

- What happened during the experiment? What did you observe:

- ◇ In the leaves?

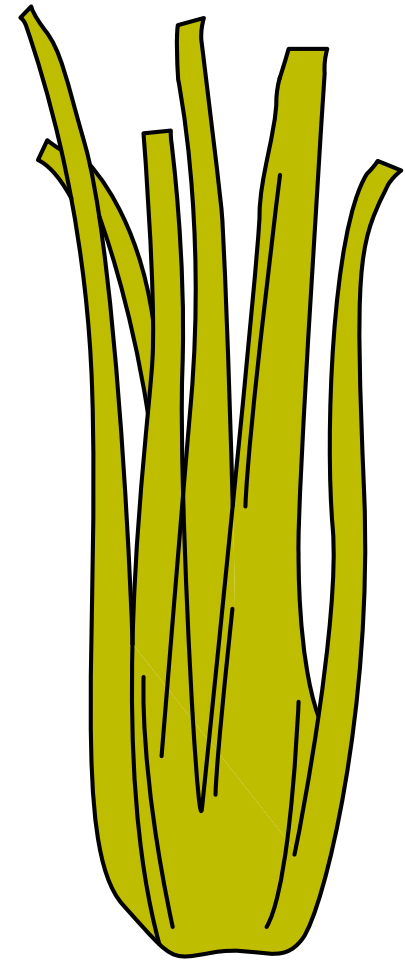
- ◇ In the stem?

- Observe closely and draw and label (annotate) your findings.
- What can you investigate further?



Ideas for further investigation

- What might happen if you remove the leaves?
- What might happen if you place the plant near an open window?
- Can you do any research on the internet or in books to see whether the leaves are important for movement of water through the stem?



Final task:

How does water move through
a stem of an oil palm tree?

- Label and annotate (describe in writing around the diagram) how water is transported in an oil palm tree.

