Experiment directions

Topic: Capillaries with celery
Biology

Duration: 5
Waiting time: At least a few hours, a day or more for clearest view of capillary veins

Materials:
Two or more stems of celery, at least one for each colour you wish to use // As many glasses as you have colours you wish to use // water enough to fill each glass 2/3 full // food colourings (blue works especially well)

Directions:
1. Gather all materials.
2. Add water to each glass you have.
3. Add food colouring to each glass.
4. Add celery sticks and leave to wait.
5. Once waiting time has passed, cut the celery. You can cut it along the stalk to see how the colour rises along the stem. You can also cut across the stem to see a cross-section of the stem.

Notes:Blue colour is easiest to see and works best for this experiment

The Science behind the experiment: Plants use the capillary veins to bring water from the roots to the leaves. This works in flowers and in trees the same way. As water is vaporised in the leaves, more watergets pulled up to replace the vaporised water. The colour travels with the water, butgets left behind as it does not evaporate, so leaves turn a different colour.