

Experiment With Nature

To examine the movement of water up a plant

What you need:

A Jar of water
A Celery stalk with leaves
Food colouring

What to do:

1. Add a few drops of food colouring to the water and then add the celery stalk.
2. Leave for about an hour in a warm sunny room.
3. Examine the leaves and the outside of the stalk and then cut through it and look at the inside.



What happens and why?

Water is transported through plants in veins in the leaves and the stalk. By adding food colouring to the water you can see where the water has travelled. The veins in the leaves and stalk should now be red.

Here are some activities you can try at home or at school. Please ask for permission from a grown-up before you begin.

Homemade Dye

What you need:

White wool
A white t-shirt
A few daffodil flowers
An old saucepan
Sieve



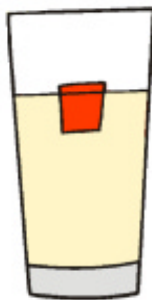
What to do:

1. Boil the daffodil flowers in some water (be sure to have an adult with you) until the water turns yellow.
2. Using a sieve strain the water to remove the flowers.
3. Add the wool or t-shirt until it changes colour.
4. You can experiment with other brightly coloured flowers to see if it will work with them.

Experiment to show that water is heavier than ice

What you need:

An empty glass
Water
Cooking oil
Food colouring
An ice cube tray
A freezer



What to do:

1. Fill the ice cube tray with water and add a few drops of food colouring. Put into freezer until frozen.
2. Pour the oil into the glass until it is half full.
3. Gently put an ice cube into the oil and record what happens next.

What Happens and why?

The ice cube floats on the surface of the oil but because water is heavier than ice, melting drops of water gradually sink to the bottom of the glass. (Food colouring makes this easy to see.) Now you can understand why icebergs float on the sea!

Watch a Bean Grow

What you need:

An empty jam jar
Cotton Wool
A bean (a runner bean from your local garden centre)
Water



What to do:

1. Fill your jar with cotton wool.
2. Gently push the bean down the side.
3. Using the water, wet the cotton wool until it is all completely wet.
4. Place near a window with the seed facing the sun and watch what happens.

What happens?

After a while the bean will sprout a root and a shoot. The shoot goes up so as to get closer to the sun and the root goes down to find more water. It uses both the sun and water to make food grow.