



Experiment with flower colours at home

You need:

Flower petals - red, purple or blue ones work well. Only pick petals from a living plant if the owner says it is OK.

A mortar and pestle. If you don't have one, you need a ziplock bag, a hammer, and a board to hammer on.

Water.

2 teaspoons or other small spoons.

A drinking glass.

White ice cube tray, or empty white styrofoam egg carton

2 droppers (e.g. children's medicine droppers)

Vinegar

Baking soda (not baking powder)

1. Make petal juice.

Put several petals in the mortar, add a little water, and grind until the water is as dark as the petals.

Alternatively, put your flower petals in a ziplock bag.

Squeeze the air out of the bag, close it, and lay the bag on the board.

Use the hammer to smash the petals in the bag. Keep hammering until they are pulp.

When all the petals are pulp, open the bag and add 5 teaspoons of water.

Hold the bag between your fingers and thumbs and rub the petals until the water is as dark as the petals.

2. Make different flower colours.

Half fill the glass with water.

Add one teaspoon of baking soda and stir it in. This is your "baking soda solution", a base.

Use a clean teaspoon to put petal juice into some of the wells of the white tray.

Use the droppers to slowly add either baking soda solution (base) or vinegar (an acid) to them.

Try adding more or fewer drops to make different colours. Try changing the colours back and forth. Experiment!

What's going on?

Some coloured chemicals in flowers can change colour - they are pink/red/orange in acid and purple/blue/green in base.

So flowers can make some of their different colours by having different levels of acid or base in their petals.