

Cabbage PH Indicator

Time: 15mins

Age: 5-13

Parent help required for younger scientists!



Scientists love asking questions and comparing things around them. Sometimes they want to know if a substance is an acid (like vinegar or lemon juice), a base (like soap), or neutral (like water). To do this, they use a pH indicator - a substance that changes colour to show where another substance falls on the acid-base scale, a number line from 0 to 14.

Even though cabbage might seem like a boring vegetable, its leaves contain a chemical called anthocyanin, which acts as a natural pH indicator. This means you can bring the science lab to you with cabbage!

Step 1:

Gather all your materials:

- Red cabbage
- Knife
- Sieve
- Heat proof bowl or container (a glass measuring jug is perfect)
- A jar or storage container

Step 2:

Cut up your red cabbage and place it into your glass container.

Step 3:

Carefully pour boiling water over the cabbage until it's fully covered. Let it sit for at least ten minutes to allow the colour to leach out.

Step 4:

Place a strainer over your storage container and carefully pour the cabbage water through it.

Step 4:

Let your pH indicator cool and then get testing! Pour a little cabbage indicator into cups, add a small amount of each substance you want to test, and watch for colour changes. The colour will tell you if it's a base (green/yellow), neutral (purple) or an acid (pink/red).

