

Measuring Acids and Alkalis



Equipment Required

Small piece of Red/purple Cabbage (retrieved from a bag of mixed salad?)

Mixing Container (Mortar & Pestle if you have one or small dish and a spoon)

Acids for testing – vinegar, lemon or lime juice, clear fizzy lemonade Alkalis for testing – bicarbonate of soda, washing soda crystal, clear liquid soap.

Small clear container(s) for testing pH.

What to do

1. Use the dish & spoon or the Mortar & Pestle to grind up the red cabbage with a little water so that a purple liquid can be extracted.
2. Transfer the liquid from the red cabbage in small quantities to small clear containers. Small tumblers would work or shot glasses would be perfect. Transfer the liquid into the same number of containers as you have chemicals for testing that you have from the list above.
3. Add the chemical to the red cabbage indicator and observe the following colour changes:
 - Purple (no change) is pH Neutral
 - Red/Pink is pH acid
 - Green is pH alkali
4. You could test other chemicals from the house if you have additional red cabbage indicator with the appropriate precautions for safety.

Video Demonstration – <https://youtu.be/IYPRYnDICKA>