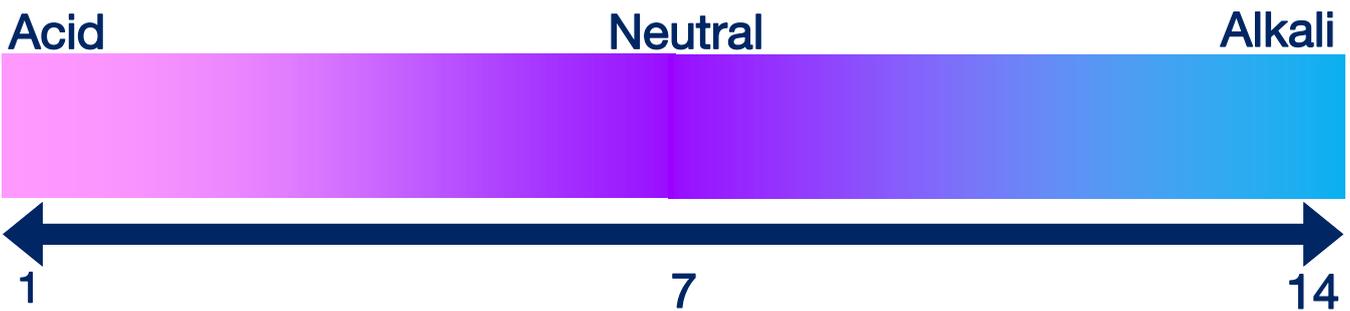


Acid or Alkali?

Use a red cabbage to test PH of food, drink and household substances

How to do it...

1. Chop up cabbage and soak in water
2. Once water has turned purple add some to 2 plastic cups
3. One of these cups is your control for comparison and the other is your 'experimental' cup.
4. Add a household substance such as *cola, lemon juice, ketchup, bicarbonate of soda, soap, vinegar, or tooth-paste* to the cup.



The Science Bit...

- Acids and alkalis change the number of hydrogen ions (H^+) in a solution. Acids produce more H^+ ions and alkalis produce lots of hydroxide (OH^-) ions. The hydroxide ions neutralise the H^+ removing them from the solution.
- Red cabbage is a indicator of acidity.
- The more acidic something is the more pink the red cabbage water will turn
- The more alkali it is the bluer it will go.
- Red cabbage contains a substance called Flavin a pigment responsible for the red, blue and purple colours in some plants.
- The more hydrogen ions there are the pinker the Flavin goes, but in alkali conditions the pigment breaks up and turns blue.

This is known as a pH test, in scientific laboratories pH testing is used to test the acidity of different substances.

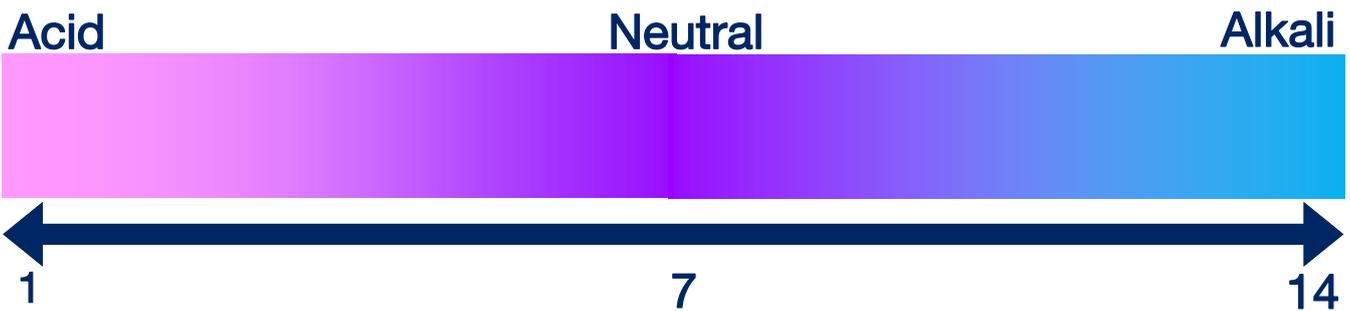
Why not create your own colourful pH scale with red cabbage?

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