



Swansea University
Prifysgol Abertawe

IMPACT

Super Science Kits!

You are about to take on the challenge of replicating one of our exciting experiments in your very own home.

In this experiment you will learn how to use a smart phone (or tablet) as a piece of scientific equipment.

You will use the camera to monitor colour changes to detect pH in various solutions.

The pH scale (1 – 14) is used to measure whether a solution is acidic, neutral or alkaline. Substances with a low pH (lower than 7) are classed as acidic, substances with a pH of 7 are neutral and substances with a high pH (higher than 7) are classed as alkaline.

It is important to measure pH to make sure the water we drink is safe – the pH should be around 7.

You can take part in this experiment as a group or work on your own to test the results of your experiment against those of our experts.

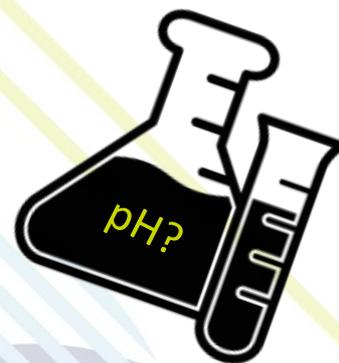
Please note, children will need to be accompanied and assisted by an adult whilst undertaking this experiment. These kits are aimed towards children aged between 8 - 12.

Contact Us:

www.swansea.ac.uk/engineering/impact

 [SU_engIMPACT](https://twitter.com/SU_engIMPACT)

 [su_engimpact](https://www.instagram.com/su_engimpact)



For more fun and activities visit:

www.swansea.ac.uk/swansea-science-festival/

[#SwanseaSciFest](https://twitter.com/SwanseaSciFest)



Engineering and
Physical Sciences
Research Council



Simply take a picture of your experiment and upload to **#SwanseaSuperScientist** to receive your completion certificate and be entered into our big prize draw for a family (of 4) ticket to Plantasia!



**PRIZE
DRAW!**

Simply view our online guide below:

<https://bit.ly/SuperScienceKit>

You can follow along with our online tutorial featuring our experts:

<https://bit.ly/pHbubblewrap>

Science Kit contents:

- Test tubes
- Goggles
- Nail varnish
- Pipettes
- Pipette tip
- Bubble wrap
- Link to instructions

And just for fun!

- Badges
- Glows sticks
- Bookmark
- Links to science factsheets and experiments

You will need:

- A saucepan
- Knife
- Scissors
- Chopping board
- One whole red cabbage
- Access to an Android phone or tablet

One cup of the following:

- Lemon juice
- Lemonade
- Malt vinegar
- Bicarbonate of soda
- Washing powder
- Sparkling water

WARNING: Red cabbage may stain. Gloves and apron recommended.

**ADULT
SUPERVISION
REQUIRED**

