

JR-SCIENTISTS

CABBAGE CHEMISTRY

This cabbage science experiment is fascinating.
Amazing chemistry for kids with simple food!

INSTRUCTIONS:

STEP 1: Cut your red cabbage into small pieces.

(This experiment will require adult help/supervision.)

STEP 2: Place your cut up cabbage in a medium saucepan and boil for 5 minutes. After the 5 minutes, cover and let it rest for 30 minutes.

STEP 3: Carefully pour the liquid into the jars.

STEP 4: Now add your acids and bases. Add lemon juice to one jar, and baking soda to the next.

STEP 5: Try various other substances and record your results!

THE SCIENCE

What's an acid? On a pH scale acids usually, register above a 7 and are brighter in color when you use a piece of litmus. If you ask the kids about what types of things around the house are acidic, they might say vinegar or lemons. An acid is usually recognized as something with a sour or sharp taste.

Red cabbage contains anthocyanin which is a water-soluble pigment. This pigment changes color when it is mixed with an acid or a base. More red when mixed with an acid and more green when mixed with a base.

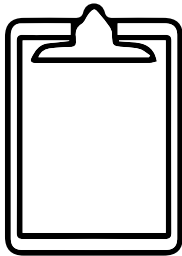
SUPPLIES

Red cabbage
Several jars
or small containers
Lemons
Baking soda
Other acids and
bases to test
pH test strips
(optional)



Cabbage PH Observations

Use this worksheet to process and evaluate your work.



RECORD

Liquid #1

PH level/color

Liquid #2

PH level/color

Liquid #3

PH level/color

Liquid #4

PH level/color

What did you learn about acids, bases, and PH?
