

Frehley Year 5 Monday 2nd August 2010

Red Cabbage Experiment

WRITTEN OBSERVATION

Red cabbage can be used as an Indicator to show if a substance is an acid, alkaline or neutral. We are measuring PH balance. PH means the measure of the acidity or alkalinity tested in a solution.

We made a solution of red cabbage leaves and water and liquefied them in a blender. We tested seven substances in the solution.



Variables

Independent: The independent variables were the different substances we tested and then listed. Vinegar, sugar, coke zero, washing powder, bi-carb soda, lemon juice and grape juice.

Controlled: The controlled variables is the quantity of the independent variables (We put one teaspoon of each substance), red cabbage juice and the glasses that we put it in.

Dependent: I expected them to change colour whether it is an acid or base. For acid it should turn red and for the base it should turn green.

I have done a table of my results.

	ACID (red)	BASE (green)	NEUTRAL (stays purple)
Vinegar	yes		
Sugar			yes
Coke zero	yes		
Washing powder		yes	
Bi-carb soda		yes	
Lemon juice	yes		
Grape juice	yes		



Why does this work?

I found out that the red cabbage has a pigment that causes the cabbage juice to change colour. When it turns red it means that the substance added is acidic. When it turns green it means that the substance added is alkaline. The cabbage juice with the substance, sugar in it, stayed the exact same colour, purple which means it is neither acidic or alkaline, it is neutral.