The Witch's Brew

(an effervescence demonstration)

Equipment:

- a tall thin drinking glass
- 1 flat baking tray
- 2 tablespoons of bicarbonate of soda
- 2 tablespoons of dish washing liquid
- food colouring of your choice
- ½ of a cup of vinegar

Instructions:

1. Place the drinking cup on the tray.
2. Put the bicarbonate of soda and dish washing liquid into the glass.
3. Add about 6 drops of food colouring & mix into a paste.
4. Quickly pour the vinegar into the glass.
5. Think, Pair, Share with a partner. – What just happened and why do you think it happened?

Brief Explanation

In this experiment the fizz is a chemical reaction between the baking soda and the vinegar. When the 2 chemicals mix carbon dioxide is produced. The gas then makes bubbles with the liquid. The dish washing liquid makes the bubbles last longer and makes foam. Too much gas is produced for the small glass and as a result spills over the top of the glass.

Extension – I believe that you could make this demonstration even more impressive. Try manipulating the variables (change stuff) – amounts of chemicals, different detergents, different container, more / less / different coloured food colouring, don't mix to paste, add detergent first & put bi-carb on top. **Get experimenting!**