

# Awe and Wonder

## Fizzy Colours

### You will need:



Paint pots or plastic cups

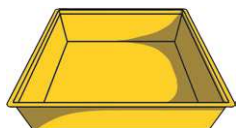


White vinegar



A few tubs of bicarbonate of soda

Shallow tray



Paintbrushes or medicine syringes



Food colouring in several colours



### Method:

1. Pour out the bicarbonate of soda into the tray and spread it out.
2. Drop a few blobs of different coloured food colouring into each paint pot.
3. Top up to half full with white vinegar.
4. Put a paintbrush or medicine syringe into each paint pot.
5. Suck the coloured vinegar into the syringe or soak the paintbrush.
6. Drip the colour into the tray. What happens to the powder? What happens to the liquid?
7. Once you have dripped 2 or more colours use the brush to mix the 2 colours together. What happens?
8. What can you see in the mixture?



### The Science

You just made a chemical reaction! You mixed the acid (vinegar) and the alkali (bicarbonate of soda).

Did you see the bubbles of carbon dioxide ( $\text{CO}_2$ )? That is a gas. The bicarbonate of soda is an alkali, it reacts or changes when it mixes with an acid like vinegar because they are very different. If you mix either one with water (which is neutral, not an acid or an alkali) nothing happens because they are not as different.

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