

# A Sparkling Halloween Drink

September 28, 2024 / DIY / STEM Activities / Chemistry / Ages 3 - 5 / Bubbly Witches Brew



A clear plastic bowl sits on a dark grey surface, filled with a bright red, viscous substance. Several small plastic spiders and googly eyes are embedded within the substance, creating a playfully gruesome Halloween scene. The bowl rests on a larger, clear plastic tray, which reflects the surrounding environment. The overall effect is one of spooky fun, suggesting a Halloween-themed craft or decoration.

- Age: 3-5
- Time: Less than 30 minutes
- Mess Level: Messy

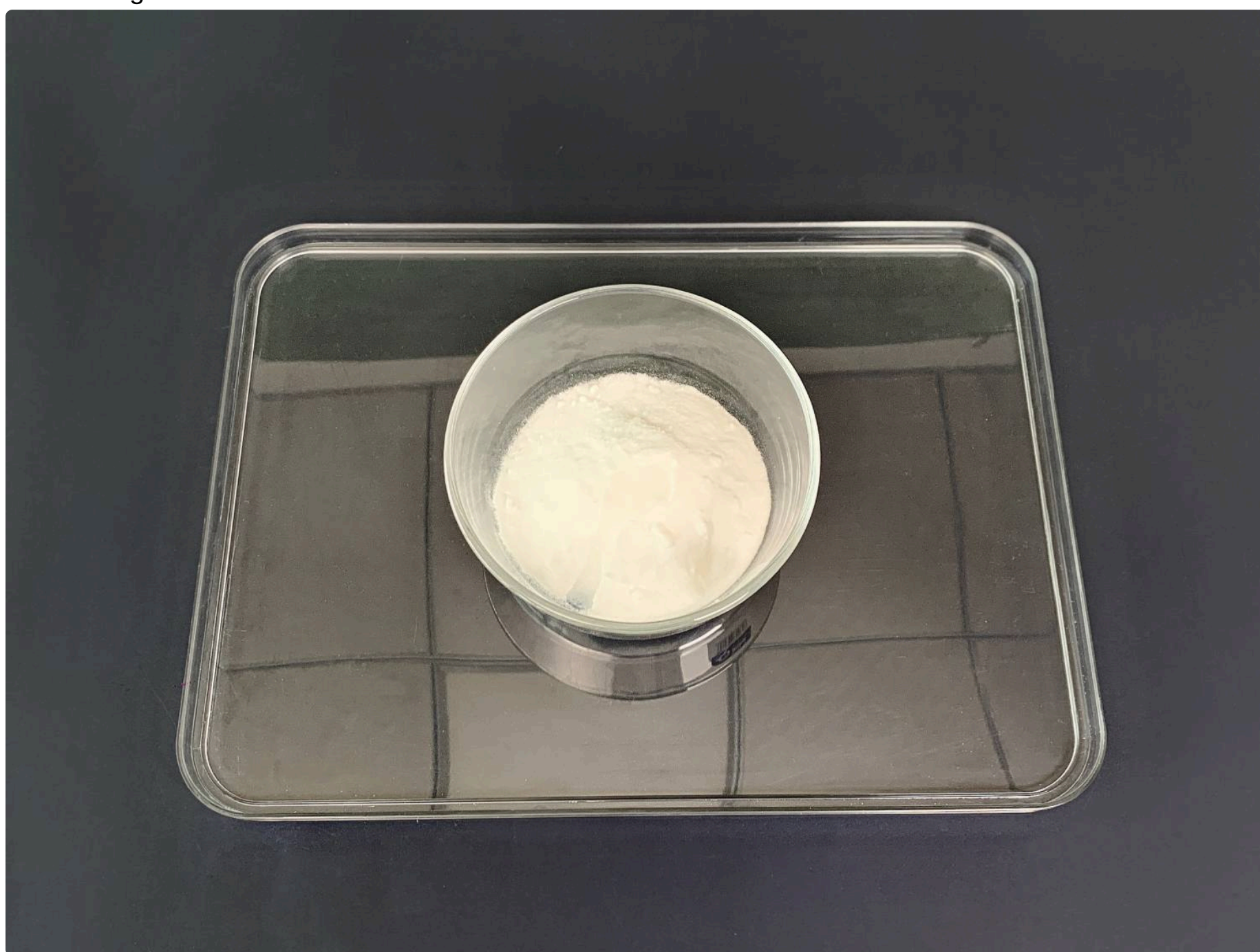
## Materials Needed:

A large container  
Bicarbonate of soda  
Vinegar  
Food colouring  
Washing-up liquid  
Small toys like eyeballs and spiders

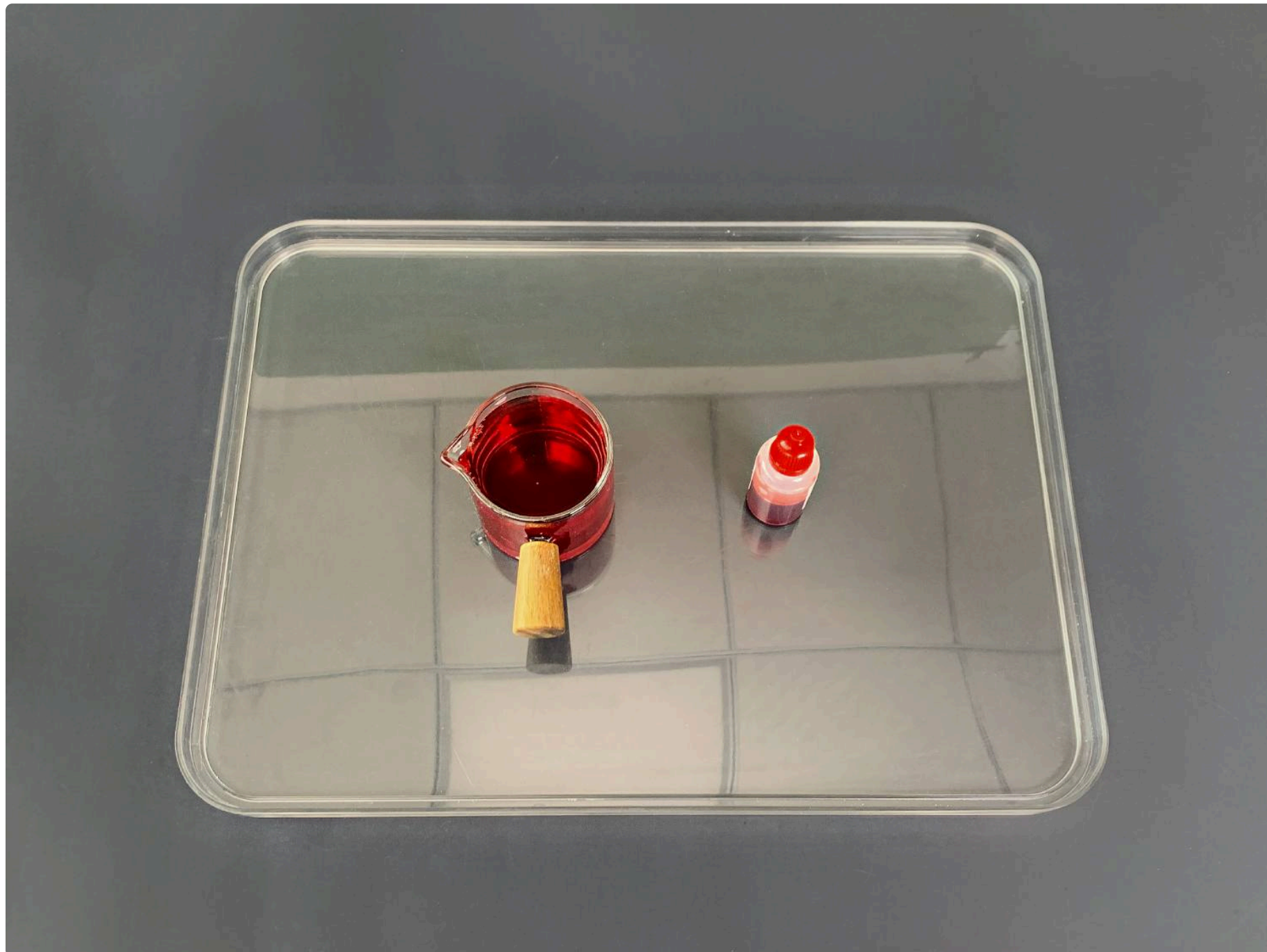


## Step-by-Step Instructions:

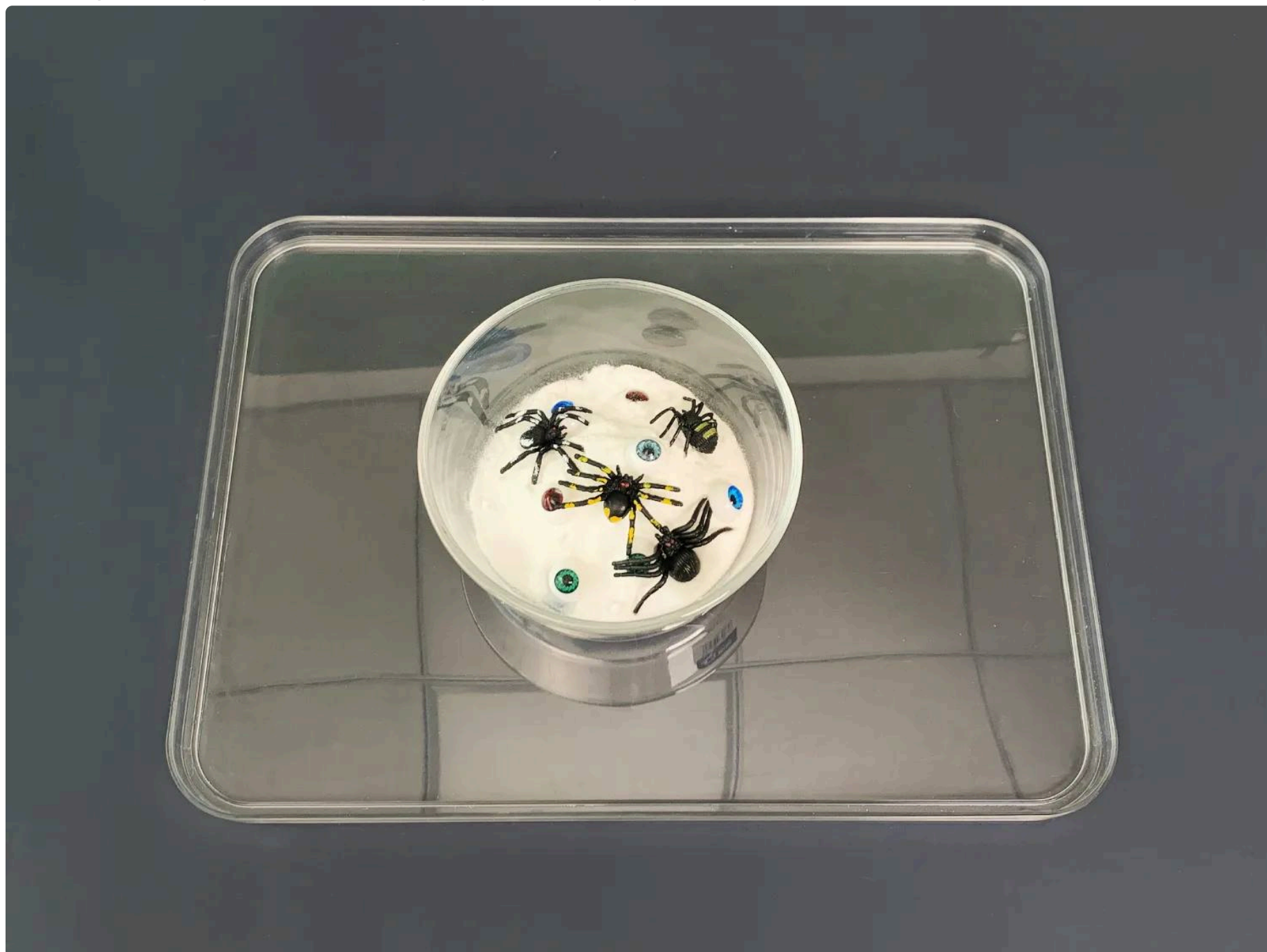
1. Pour a cup of bicarbonate of soda into the container and add a small amount of washing-up liquid. Please place the container on a large tray, or you can move it outdoors for this operation. The following scenes might cause some mess.



2. Pour half a cup of white vinegar into a cup and add your preferred food colouring. If you want the colour to be more vibrant, you can add more colouring.



3. Place spiders, eyeballs, or other spooky small toys you can find at home into the container.



4. Pour the vinegar into the container. The mixture in the container will start to fizz and bubble up with a large amount of coloured foam. You can continue adding bicarbonate of soda and vinegar to create more foam. Observe the bubbling process with your family!



## The Science Behind It:

The witch's magic comes from the chemical reaction between vinegar and bicarbonate of soda. When vinegar (containing acetic acid) and bicarbonate of soda (sodium bicarbonate) mix, they undergo an interesting acid-base reaction, producing carbon dioxide gas. This gas forms a large amount of foam in the liquid, giving a bubbling effect. Adding washing-up liquid makes the foam even richer.