

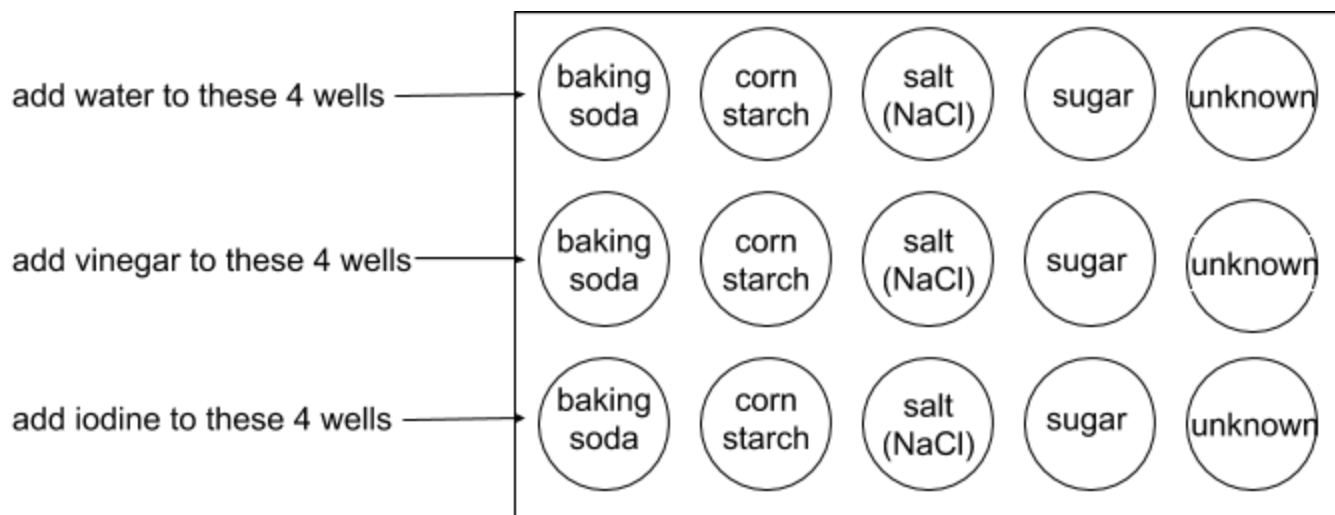
**Materials:**

a microplate or test tubes,

baking soda ( $\text{NaHCO}_3$ ), corn starch, iodine solution ( $\text{I}_2$ ), paper, salt ( $\text{NaCl}$ ), sugar ( $\text{C}_{12}\text{H}_{22}\text{O}_{11}$ ), vinegar ( $\text{CH}_3\text{COOH}$ ), water, a “mystery” compound (optional)

**Procedure:**

**Part 1:** Place a small amount of the following substances into separate wells in the microplate as shown on a diagram below:



**Part 2:** Add 10-15 drops of water and vinegar into each microwell as shown above. Add 2-3 drops of iodine into each microwell as shown above. Describe any changes that occur.

Note: the reaction takes place if you observe any of the following:

- change in colour
- gas formation (bubbles)
- precipitate formation (solid forming - cloudy)

**Part 3:** Teacher Demonstration: Flammability

Light a bunsen burner and drop a small pinch of each substance on an open flame. This allows you to see if there is a flash point - a positive test would be flare up of the flame