**Part D: Effect of a Catalyst on a reaction Rate**

**Aim:** to investigate the effect of a catalyst on reaction rate

**Materials:** \*\*\* Safety Hydrogen peroxide can irritate skin and eyes\*\*\*

* A clean 100 ml graduated cylinder or plastic soda bottle
* 50ml of 20-volume hydrogen peroxide liquid (9% H2O2)
* 5 g KI in 10ml of warm water (catalyst)
* 10 ml liquid dish washing soap
* Food coloring
* 1 250ml beaker
* Safety goggles

**NOTE:** The foam will overflow from the bottle, so be sure to do this experiment on a washable surface, or place the bottle on a tray.

Write a **hypothesis** for the reaction between calcium carbonate and hydrochloric acid

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**Method:**

* 1. On a scale, measure 5g of KI and mix with 10ml of warm water in a 250 ml beaker. Dissolve by stirring
	2. Add 10 ml of dish soap to the solution
	3. Pour 50 ml of 9% H2O2In a 100ml graduated cylinder. Add a few drops of food colouring to each side.
	4. Prepare a timer before mixing. Mix both together and time the reaction to completion.
	5. Repeat the experiment without the catalyst **KI**

Write a *balanced chemical equation* to represent the reaction: **exothermic? Endothermic?**

**Observations & Notes:**