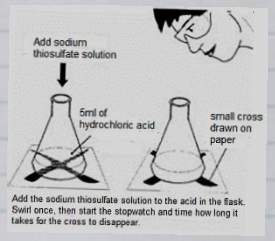
Concentration and Rate

1. Measure out 5ml of 2M HCl using the small measuring cylinder and transfer into the conical flask.
2. Place the flask on the black cross.
3. Use the second measuring cylinder and measure out the sodium thiosulfate and water as per table.
4. Add the sodium thiosulfate solution from the measuring cylinder to the conical flask.
5. Swirl once and start the stopwatch.
6. Stop timing when the cross has disappeared.
7. Repeat for the other sodium thiosulfate concentrations.
8. Calculate the rate.
9. Plot a rate vs concentration graph.



$2HCl_{(aq)} + Na_2S_2O_{3(aq)} \rightarrow S_{(s)} + SO_{2\,(g)} + 2NaCl_{(aq)}$

	Vol $Na_2S_2O_3$ (ml)	Vol H_2O (ml)	Conc $Na_2S_2O_3$ (M)	Time (s)	Rate 1/time (s^{-1})
1	50	0	0.15		
2	40	10	0.12		
3	30	20	0.09		
4	20	30	0.06		
5	10	40	0.03		

Risk Assessment

Hazard	Risk	Control measure

Wipe up any spillages