

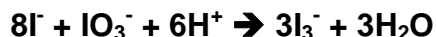
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HONORS WORKSHEET 13c: Kinetics Inquiry



The aim of this exercise is to determine the orders of reaction for iodate(V) ions (IO_3^-), and hydrogen ions (H^+) in the reaction below (in this experiment we are NOT investigating the order with respect to iodide (I^-) ions;



The experiment is to be carried out virtually, by visiting the simulation at the web page, here;
<http://web.mst.edu/~gbert/IClock/Clock.html>

Your task is two-fold;

1. Use the simulation to determine the order with respect to the two reactants listed above, and
2. To write a set of instructions for someone else to follow, to allow them to carry out the task in #1.

Hints and Tips:

- Keep the H_3AsO_3 concentration fixed at 0.003 M
- Keep the starch concentration fixed at 0.006%
- Keep the temperature fixed at 25°C
- When adjusting the concentrations for the experiment, the concentrations (after mixing) are shown on the right hand side of the screen; these are the initial concentrations during the experiment.
- Clicking on "Mix the Solutions" takes you to the experiment page
- You need to STOP the timer manually (by clicking on the stop button) when the reaction is complete