| **Dougherty Valley HS AP Chemistry** | | **Name:** | |
| --- | --- | --- | --- |
| **Kinetics – Rate of Reaction** | | **Date:** | |
|  |  | **Period:** | **Seat #: N/A** |

| **Data Table [**fill in title**]:** | | | |
| --- | --- | --- | --- |
| **Trial** | **[FeCl3]** | **[KI]** | **Initial rate (s–1)** |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| \* Must show at least one calculation for each column above on your calculation page (make new page and add photo(s). Name on photo, clear, legible, complete. | | | |

\*To be completed after the experiment in the google doc, but you may put notes down for yourself

| **Discussion questions (handwritten on paper, insert image.** |
| --- |
| Calculate the molar concentration of FeCl3 and KI for each reaction and record the values in the table above. Provide one example to show how you completed the calculation. |
| 1. What is the order of the reaction in FeCl3 and KI? **Explain**. |
| 1. Write the rate law expression for the reaction. |
| 1. Is it possible to calculate the rate constant, *k*, from your data? If so, calculate the rate constant. If not, explain why not. |
| Insert Image of discussion questions here. #1 will have its own image |