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| **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 – photo/scan and insert into this box: | | | |

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

|  |  |
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| **Discussion questions** | |
| 1. 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. | This photo/scan should already be put in the above table |
| 1. What is the order of the reaction in FeCl3 and KI? Explain. | [Fill in answer here] |
| 1. Write the rate law expression for the reaction. | [Fill in answer here] |
| 1. Is it possible to calculate the rate constant, k, from your data? If so, calculate the rate constant. If not, explain why not. | [Fill in answer here] |