**Radioactive Iodine**. Copy the data to Excel and make a plot of Decay Rate (in Counts/second) versus Time (in Minutes). Fit the data to an exponential law (with the fit equation displayed). Add/change the title. Label the axes. Paste the graph below.

Paste graph here

|  |  |
| --- | --- |
| Time (min) | Rate (counts/s) |
| 4 | 395 |
| 36 | 159 |
| 68 | 68 |
| 100 | 26 |
| 132 | 12 |
| 164 | 5 |
| 196 | 2 |
| 218 | 1 |

What are the parameters of your fit? And what are their units?

|  |  |
| --- | --- |
| Parameter value | Unit |
|  |  |
|  |  |

Use the graph to estimate the “half life” of radioactive Iodine – the time for the rate (which is proportional to the amount of Iodine) to get to half of its initial value.

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