Neutron Activation Pre-Lab

1. What does Neutron Activation mean?

2. How do we determine the half-life?

3. Write out the equation that describes a typical fission event.

4. How is a runaway reaction prevented?

5. What is radioactive decay?

6. What does \(-\Delta N/\Delta t = kN\) mean?

7. What are the units on a first order rate constant?

8. If you do not have your ID with you, go home quickly and get it.

9. Set-up the chart needed in your lab notebook. Leave room for all of the data.

10. Assuming a detector counts 1900 gross counts for a time period of 0.2 seconds what is the gross cpm? If the background cpm is 30 what would be the net cpm?

Lab Notebook:

Fill out your lab notebook with any information you believe it should contain.