

## 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.