Prelab: Radioactivity

Instructions: Prepare for this lab activity by answering the questions below. Note that this is a PreLab. It must be turned in at the start of the lab period. Time cannot be given in lab to perform PreLab activities. After the start of lab activities, PreLabs cannot be accepted. Points will be taken off if your work is not neat and well organized. To receive credit you must show your work.

1. (5 points) If one starts with 60000 counts, how many counts would be expected after 4 half-lives?

2. (5 points) If 60.0 mm of a metal stops 95% of incident gamma rays, how much will 30.0 mm stop? Answer in terms of the original number.

3. (5 points) Give a reason for each caution in this experiment.