

GAMMA-RAY SPECTROSCOPY

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WATCH the GAMMA RAY and the RADIATION SAFETY VIDEOS

You must watch the *Radiation Safety Video* and sign the *Office of Radiation Safety* form, and get a *Radiation Ring* before you use the apparatus in this experiment.

Ring # _____ Issued _____ Returned _____
(Date and Staff Signed) (Date and Staff Signed)

Your report will not be accepted until you have turned in your ring.

Student's Name _____

Partner's Name _____

Get Reprints from the Physics Library or on-line from the 111-Lab Shared Network Drive

Pre-lab Discussion Questions and Staff Sign Off

It is your responsibility to discuss this lab with a professor or instructor on the first day of your scheduled laboratory period. This signed sheet must be included as the first page of your report. Without it you will lose 1/3 of a letter grade. You should think about and be prepared to discuss at least the following before you come to lab:

1. What are gamma rays? How are the gamma rays produced, that are used in this experiment?
2. By what means does the sodium iodide detector detect photons? What is a "photopeak"? What role do photopeaks play in this experiment? What is Compton scattering? Do we observe Compton scattering in this experiment?

Staff Signature _____ Date _____

Completed on the *first* day of lab? (circle) Yes / No

Mid-Lab Questions on the next page.

Mid-lab Questions and Staff Sign Off

On day 4 of this lab, you should have successfully produced a plot of the energy spectrum from each source, properly calibrated in keV or MeV. Show them to an instructor and ask for a signature.

Staff Signature _____ Date _____

Completed on the *fourth* day of lab? (circle) Yes / No

INCLUDE THESE TWO SHEETS AS THE FIRST PAGES OF YOUR REPORT

