

Name: _____

Lab: Nuclear States and Nuclear Models

Grader: _____

Grading Rubric	Subscore	Maximum	Score	Total		
Title Page				1		
Results				57		
Spreadsheet		5				
Calculate the background corrected net countrate		5				
Half-Life of Ba & straight line calculation		5				
Graph (w/ best fit)		5				
Energy Differences		5				
Identify each of the Pb X-rays		5				
FWHM of the annihilation radiation peak		3				
Comparison		5				
Energies of first excited state and vibrational triplet		5				
Are the energies of the three vibrational triplet. . .?		5				
Energies of Sm and Gd from Eu decay		5				
Ratios of the energies		2				
Identity of Sm and Gd		2				
Discussion						17
Compare your measured and theoretical calculations		5				
Is the theoretical result close enough. . .?		5				
Identify which state is 0+ and 2+		2				
Explanation of identification		5				
Units (-1 every occurrence)						
Measurements w/o uncertainty (-1/2 every occurrence)						
Total				75		

