

Name: _____

Lab: Bragg Diffraction of X-Rays and of Electrons

Grader: _____

Grading Rubric	Subscore	Maximum	Score	Total
Title Page				7
names / title		2		
abstract		5		
Introduction				15
Background information		5		
Important equations		5		
Lab objectives		5		
Experimental Procedure				10
Description of procedure		10		
Results				50
KCl & KBr Spectra		10		
Lattice constant "a"		2		
Miller indices and d-spacing		2		
Relative intensities		2		
Unknown Spectra		5		
Lattice constant "a"		3		
Miller indices and d-spacing		3		
Unknown Identity		4		
Spreadsheet (Diffraction Rings)		5		
Graphs (x2, unless plotted together)		10		
Slope & Uncertainty		2		
Interplanar spacings		2		
Discussion				40
Destructive Interference Explanation		5		
JCPDS Comparison		10		
Electrons vs. Photons Diffracted		5		
Derivation of 1.227 constant		5		
Explanation of "Diffraction Rings" Results		10		
Uncertainty of d-values		5		
Significant Figures				3
Units (-1 every occurrence)				
Measurements w/o uncertainty (-1/2 every occurrence)				
Total				125

