

Name _____ Period _____

Assignment 3R – Unit 3 Review

30 Points

Complete the following chart for the parts of a standard isotope

Element Name	Atomic Number	Mass Number	Number of Protons (p^+)	Number of Electrons (e^-)	Number of Neutrons (n^0)	Isotope Notation
Strontium (Sr)	38	88				
Fluorine (F)			47		60	

Complete the following chart for the elements / ions shown below.

Element	Atomic Number	Group Number (<i>Trad.</i>)	Group Number (<i>Modern</i>)	Period Number	Main Block Group Name (<i>metal, non, etc</i>)	Individual Group Name (<i>Alkali, Earth etc</i>)
K						
O						

Element	Valence e^- <i>Neutral Atom</i>	Ion Charge	Lose / Gain e^-	Cation or Anion
Al				
Br				

Solve the following nuclear decay questions to find the resulting isotopes.

$^{218}_{85}\text{At} \rightarrow ^4_2\text{He} + \underline{\hspace{2cm}}$ Alpha (α) Beta - (β^-) Beta + (β^+)	$\underline{\hspace{2cm}} \rightarrow ^4_2\text{He} + ^{234}_{92}\text{U}$ Alpha (α) Beta - (β^-) Beta + (β^+)
$^{188}_{74}\text{W} \rightarrow ^0_{-1}e^- + \underline{\hspace{2cm}}$ Alpha (α) Beta - (β^-) Beta + (β^+)	$^{64}_{29}\text{W} \rightarrow ^0_{+1}e^+ + \underline{\hspace{2cm}}$ Alpha (α) Beta - (β^-) Beta + (β^+)