

(21 points)

Directions: Complete the following table, fill in the missing Nuclear Symbol, Atomic Number, Mass Number, Protons, Neutrons, Electrons, and Element Name

	Nuclear Symbol	Atomic Number	Mass Number	Protons	Neutrons	Electrons	Element Name
1		17			17		
2			103			45	
3				33	42		
4	${}^{84}_{36}\text{Kr}$						
5	${}^{52}_{24}\text{Cr}$						
6					61	47	
7		38	88				
8			55		31		

9. **BONUS:** (2 points) Show all work. Calculate the average atomic mass of titanium if titanium consists of the following five isotopes:

Isotope	Mass	Natural Abundance
${}^{46}\text{Ti}$	45.952629	8.0%
${}^{47}\text{Ti}$	46.951764	7.3
${}^{48}\text{Ti}$	47.947947	73.8
${}^{49}\text{Ti}$	48.947871	5.5
${}^{50}\text{Ti}$	49.944792	5.4