

## Atomic Structure & Periodic Table Review – Ch. 10

ATOMIC STRUCTURE – COMPLETE THE FOLLOWING TABLE.

	Isotope Name	Atomic #	Mass #	p	n	e
1.	hydrogen-2					
2.		1	1			
3.				6	6	
4.			7	3		
5.	chlorine-35					
6.		19			20	
7.			24	12		
8.		33	74			
9.				47	62	
10.			107			47
11.		16			16	
12.	uranium-235					

AVERAGE ATOMIC MASS – CALCULATE THE AVG. ATOMIC MASS.

13. 80%  $^{127}\text{I}$ , 17%  $^{136}\text{I}$ , 3%  $^{128}\text{I}$       16. 99%  $^1\text{H}$ , 0.8%  $^2\text{H}$ , 0.2%  $^3\text{H}$   
14. 5 of 10 are  $^{197}\text{Au}$ , 5 of 10 are  $^{198}\text{Au}$       17. 95%  $^{14}\text{N}$ , 3%  $^{15}\text{N}$ , 2%  $^{16}\text{N}$   
15. 3 of 20 are  $^{55}\text{Fe}$ , 17 of 20 are  $^{56}\text{Fe}$       18. 9 of 10 are  $^{12}\text{C}$ , 1 of 10 are  $^{14}\text{C}$

### PERIODIC TRENDS

WHICH ATOM HAS THE LARGER RADIUS?

19. C vs. Sn      21. Li vs. K  
20. Sr vs. In      22. Ba vs. O

WHICH PARTICLE HAS THE LARGER RADIUS?

23. Mg vs.  $\text{Mg}^{2+}$       25. Na vs.  $\text{Na}^+$   
24. I vs.  $\text{I}^-$       26. Se vs.  $\text{Se}^{2-}$

WHICH ATOM HAS THE LARGER 1<sup>ST</sup> IONIZATION ENERGY?

27. Fr vs. Ne      29. Ar vs. Rn  
28. Na vs. Si      30. Be vs. Ca

## Atomic Structure & Periodic Table Review – Ch. 10