

Standard: #2-1  
ATOMIC STRUCTURE

I. Sub atomic structure

- a. Describe the properties of all subatomic particles.

II. How does an atom acquires mass.

- a. Understand why atoms of the same element have different masses.

III. How does an atom acquires a charge.

- a. Understand how an atom acquires a charge.  
b. Understand why an atom acquires a charge.  
c. Be able to determine an atom's most common charge and why. (octet rule)
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SYMBOL	ATOMIC NUMBER	MASS NUMBER	$^0_{\text{In}}$	$e^-$	Charge	$P^+$
O	8	16	8	8	0	8
F	9	18	9	9	0	9
S	16	24	8	17	-1	16
U	92	173	80	91	+1	92
Am	95	209	114	95	0	95
O	8	16	8	9	-1	8
O	8	18	10	8	0	8
O	8	12	4	7	+1	8
Al	13	25	12	13	0	13