

Memorize four things from today's notes

PURPOSE - How Do we  
use the symbols for  
subatomic particles?

MEMORIZE!

Mass*	charge
1	+1
1	0
Zero or $\frac{1}{2000}$	-1

\* a.m.u. or "Daltons"

#2 <sup>WHAT</sup> ELEMENT IS IT?

Check only number of protons

example

$\begin{cases} p=2 \\ n=3 \\ e=4 \end{cases}$  is Helium

$\begin{cases} p=15 \\ n=16 \\ e=17 \end{cases}$  is phosphorous

#3 WHAT MASS IS IT?

$$P + N = \text{mass}$$

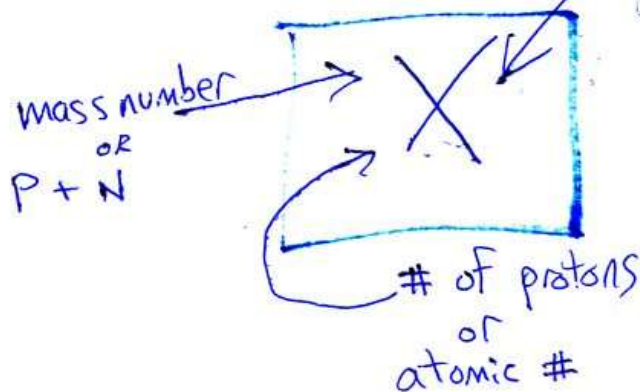
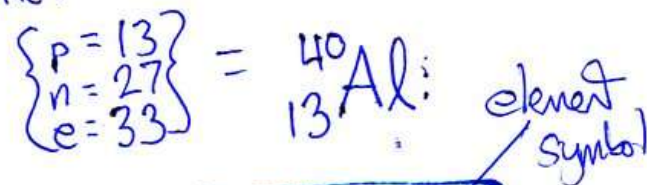
$\begin{cases} p=13 \\ n=19 \\ e=44 \end{cases}$  mass is 32

#4 WHAT CHARGE IS IT?

$\begin{cases} p=50 \\ n=60 \\ e=70 \end{cases}$   $P - E = \text{charge}$   
charge is negative  
twenty

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#5 How Do WE WRITE  
HIGH-LOW NUMBERS?



Inside the atom are nucleons

**classwork**

**Chemistry**



Name \_\_\_\_\_

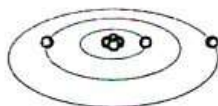
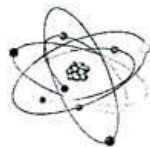
Date \_\_\_\_\_

Period \_\_\_\_\_

notes [save! memorize by Friday!]:

Each figure is a flawed attempt to show what a single atom looks like. None are correct. But we like them because they are easy ways to draw something that is undrawable.

Directions: Above each box, label the NUCLEONS and the ELECTRONS



If this atom has 12 protons and 12 neutrons it is the element



Mg

Mass number

12

High Low Number

Symbol of the

element

24  
12 Mg

If this atom has 10 protons and 11 neutrons it is the element



NEON

And it weighs

21 a.m.u.

High Low Number Symbol of the element

21  
10 Ne

If an atom has 22 protons it is the element

Titanium

If the atomic number is 34 the atom must have

34 protons.

If an atom has 79 protons it is the element

GOLD (Au)

If the atomic number is 85 the atom must have

85 protons.

mass number rule:

charge rule: