Elements & Matter Handout   name

Answer the following questions using your reference tables and the chart on the last page of this handout.

1	How many atoms are in one molecule of ethanol? $C_2H_5OH_{(L)}$	atoms.
2	How many atoms are in one molecule of sucrose? $C_{12}H_{22}O_{11(S)}$	atoms.
3	How many atoms are in one formula unit (FU)of potassium dichromate: $K_2Cr_2O_{7(S)}$	atoms.
4	How many atoms are in one FU of aluminum oxalate? $Al_2(C_2O_4)_{3(S)}$	atoms.
5	How many atoms are in one FU of sodium hydrogen carbonate: $NaHCO_{3(S)}$	atoms.
6	Convert the FREEZING POINT of Hg into centigrade with a formula.	
7	Convert the BOILING POINT of Al into centigrade with a formula.	
8	Convert the FREEZING POINT of Ti into centigrade with a formula.	
9	If you were using a distillation apparatus, why is the thermometer so important?	
10	Hg is my favorite element, W is my second favorite. What 2 elements do you like? Why? Be as funny or as goofy as you can.	

11	Write the word equation for this chemical reaction: $2Mg + O_2 \rightarrow 2MgO$ This is exothermic, so be sure to include the words "heat energy" on the correct side of the arrow. Underneath the words label the reactants and the products.
12	State the <u>complete</u> Law of Conservation of Matter. (copy it, don't guess)
13	Skip this one.
14	Name 4 physical properties of matter.
15	During a chemical reaction, the properties of the reactants A. are retained by the products B. disappear as new properties of products are created C. become a blend of properties between the reactants form in the new products D. I don't know. (Don't you dare pick "D")
16	How many grams of H_2 are needed to combine with 56 grams of N_2 to form 68 grams of NH_3?
17	If 32 grams of O_2 combines with 48 grams of Mg, how many grams of MgO form?
18	If 116 grams of NaCl decomposes into 46 grams of sodium, how many grams of chlorine also form?

Write the names of these elements

Co	Ni	Pu	Hg
Mg	Cs	He	N
Be	Ti	W	Pb
Ga	Y	Zn	As

Write the symbols of these elements from their names

Hydrogen	Potassium	Tin	Uranium
Calcium	Bismuth	Platinum	Manganese
Krypton	Radon	Antimony	Niobium
Neon	Fluorine	Xenon	Phosphorous