

Elements & Matter Handout

Name _____

Answer the following questions using the blue textbook chart on page 29, and the reference tables.

1. The chemical formula for ethanol is _____, it has _____ atoms.
2. The chemical formula for sucrose is _____, it has _____ atoms.
3. What is sucrose and do you ever eat it? _____.
4. Potassium dichromate is written as $K_2Cr_2O_7$. How many atoms are in that compound? _____
5. Aluminum oxalate is $Al_2(C_2O_4)_3$. How many atoms in that? _____
6. Sodium hydrogen carbonate is $NaHCO_3$. How many atoms is that? _____
7. What is the Kelvin freezing point for Hg? _____ Convert that to centigrade: _____
8. What is the Kelvin Boiling Point for aluminum? _____ Convert to centigrade _____
9. What is the Kelvin Freezing Point for titanium? _____ Convert that to centigrade _____
10. Which gas in the chart on page 29 is a green yellow in color? _____
10. Look at the pictures at the bottom of page 30. Describe one of the arrangements of atoms to your partner; let them describe a different one to you. This will be hard, please try your best.
11. If you were to use the distillation apparatus shown on page 34, with some sugar water, explain what you are doing, tell where the sugar "was" and where it "ends up". Is this a chemical or physical change?

12. See page 40. 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.

14. Page 41 describes the word equation for iron and sulfur becoming iron sulfide. Copy the word equation then label the reactants + products. Be sure to include the heat above the reaction arrow.

15. State the complete Law of Conservation of Matter.

16. List 4 physical properties of matter.

Write the names of these elements from their symbols.			
Co	Ni	Pu	Hg
Mg	Cs	He	N
Be	Ti	W	Pb
Ga	Y	Zn	As
Write out the symbols of these elements from their names			
Hydrogen	Potassium	Tin	Uranium
Calcium	Bismuth	Platinum	Manganese
Krypton	Radon	Antimony	Niobium
Neon	Fluorine	Xenon	Phosphorous

- _____ During a chemical reaction, the properties of the reactants
- are retained by the products
 - are lost as new properties of products are created
 - a blend of properties between the reactants form in the new products

- _____ When 2 grams of hydrogen combine with 70 grams of chlorine how much HCl forms?
- 72 g
 - 2 g
 - 70 g
 - an unknowable amount

What do the letters of TOPIC B stand for? Look it up in your BASICS now.?

Hydrogen monochloride gas ($\text{HCl}_{(G)}$) forms from the synthesis between the gases of hydrogen + chlorine. Write the word equation for this reaction, then label the reactants and products.