

Elements & Matter Handout Name/period: _____ due: _____

Answer the following questions using the text chart on page 29.

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 eat it ever? _____.
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 freezing point for Hg? _____ Convert that to centigrade: _____
8. What is the Boiling Point for aluminum? _____ Convert to centigrade _____
9. What is the Freezing Point for titanium? _____ Convert that to centigrade _____
8. Which gas 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 harder than you think, please try your hardest.
11. If you were to use the distillation apparatus shown on page 34, with some salt and some water, explain an experiment in 5 sentences about where the salt "was" and where it "ends up". Was this a chemical or physical change? Explain.

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 and the products. Be sure to include the heat above the reaction arrow.

15. State the law of conservation of mass.

16. List 5 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? What do each of these indicate might have happened?

Hydrogen chloride gas forms from the synthesis between the gases of hydrogen and chlorine, what are the REACTANTS and which are the PRODUCTS?