

## Chemistry Unit Test - Review

1. Be able to answer questions such as: For each of the following, identify as an: element, compound, solution, colloid, suspension, mechanical mixture (toothpaste, potassium, kool-aid, table sugar (a.k.a. sucrose) with chemical formula is  $C_{12}H_{22}O_{11}$ , muddy water, a tree, potassium aluminum sulphate with chemical formula is  $KAl(SO_4)_2$ , silver metal, air, a simple golden ring (composed of 75% gold, 12.5% copper, 12.5% silver)) - SEE QUIZ #1 FOR ANSWERS /10
2. Be able to match these words with their "BEST" description: homogeneous, heterogeneous, elements, compounds, mixtures, colloids, suspensions, solutions, physical changes, chemical changes, physical properties, chemical properties, qualitative, quantitative, protons, neutrons, electrons, mass number, atomic number, alkali metals, alkaline earth metals, halogens, noble gases, transition metals, rare earth metals, diatomic gases, metals, main group elements, valence shell, ionic bonding, covalent bonding, cations, anions, hydrogen. You can find definitions for all of these words in your notes! /34
3. Be able to thoroughly label a periodic table as per the colour version we did in class! /11
4. Be able to perform density questions using PROPER FORMAT. See class notes worksheet and quizzes for how to do this. Unit conversions will be required, a "guideline" will be provided. /14
- 5, 6 and 7. Be familiar with the terms "atomic number, mass number and be able to complete calculations for the number of protons, neutrons and electrons. See "Atomic Symbols" worksheet. /11
- 8, 9. Questions regarding chemical vs physical change. /4
10. Be able to complete Bohr diagrams for 6 neutral atoms. /14
11. Be able to show how ionic bonding works using Bohr diagrams and electron transfer principles. /10
12. Be able to show how covalent bonding works using Bohr diagrams and sharing principles. /10
13. Be able to use Bohr diagrams to show how either ionic or covalent bonding works (you must determine the type of bonding). /10
14. Be able to write out the type and number of atoms from a chemical formula (see "Chemical Formula" worksheet) /10

**TOTAL = 138 MARKS!!!**