Oxide and correct formulas

Science, Chemistry

16. Pure nitrogen combines directly with an active metal to form a - Nitride 17. In a sample of solid Al(NO3)3, the ratio of aluminum ions to nitrate ions is - 1: 3 18. In a sample of solid calcium phosphate Ca3(PO4)2, the ratio of calcium ions to phosphate ions is - 3: 2 19. What is the total number of atoms in (NH4)2SO4? - 15 20. What is the total number of oxygen atoms present in one unit of Mg(ClO3)2? - 6 21. What is the total number of atoms of oxygen in the formula Al(ClO3)3. 6H2O? - 15 22. Write the correct formulas for the following binary ionic compounds. Compounds | Formulas | Lithium fluoride | LiF | Calcium oxide | CaO | Aluminum nitride | AlN | Beryllium Chloride | BeCl2 | Potassium iodide | KI | Aluminum oxide | Al2O3 | 23. Write the correct formulas for the following binary molecular compounds. Compounds | Formulas | Carbon monoxide | CO | Boron tribromide | BBr3 | Sulfur hexafluoride | SFl3 | Carbon dioxide | CO2 | Carbon tetrabromide | CBr4 | Nitrogen dioxide | NO2 | 24. Write the correct formulas for the following compounds that contain polyatomic ions. Compounds | Formulas | Sodium hydroxide | NaOH | Potassium nitrate | KN03 | Magnesium sulfate | Mg2SO4 | Aluminum phosphate | AlPO4 | Aluminum nitrate | Al(NO3)3 | Ammonium nitrate | NH4NO3 | 25. Name each of the following binary ionic compounds. Formulas | Name | NaBr | Sodium Bromide | MgS | Magnesium Sulfide | CaO | Calcium Oxide | MgCl2 | Magnesium Chloride | AlF3 | Aluminum fluoride | CaI2 | Calcium Iodide | 26. Name each of the following binary molecular compounds. Formulas | Name | O2F2 | Oxygen Diflouride | SiF4 | Silicon Tetraflouride | S4N4 | Sulfur Tetranitride | SF2 | Sulfur Diflouride | H2S | Hydrogen sulfide | P4O10 | Phosphorus decoxide | 27. Name each of the following compounds. Formulas | Name | Ca(NO3)2 | Calcium Nitrate |

KOH | Potassium hydroxide | MgCO3 | Magnesium carbonate | Na3PO4 | Sodium phosphate | LiNO3 | Lithium nitrate | Mg(C2H3O2)2 | Magnesium acetate | 28. Write formulas for each of the following compounds. Compounds | Formulas | Iron(II)oxide | FeO | Tin(II)sulfide | SnS | Copper(I)chloride | CuCl | Mercury(II)iodide | HgI2 | Lead(II)nitrate | Pb(NO3)2 | Iron(III)oxide | Fe3O2 | 29. Write the names of each of the following using stock nomenclature. Compounds | Name | CuCl | Copper Chloride | FeS | Iron Sulfide | HgI2 | Mercury Iodide | Pb(NO3)2 | Lead Nitrate | Sn(OH)2 | Tin hydroxide | Fe2O3 | Iron oxide | 30. How many metallic elements are present in the formula NaKS04? - Na (sodium) is an alkali metal, K (potassium) is an alkali metal, S (sulfur) is a nonmetal, O (oxygen) is a nonmetal. So, that's two metallic elements. 31. When sulfur and oxygen combine to form a compound, which element should be written first? What values are considered in marking this choice? - Cation+Anion. Sulfur should be the first element in the compound. 32. A student named KClO3 potassium chlorine (V) oxide. Explain to her why the use of stock system is not correct in this case, and write the correct name of the substance. - The use of stock system is not correct because the atoms of oxygen are shown about 3 while she mentioned 5 naming the compound. The correct name of the substance is Potassium chloride (III) oxide. 33. Vanadium has several oxidation states. Write correct formulas for vanadium(III) oxide and vanadium(V) oxide. - Vanadium(III) oxide= V2O3 Vanadium(V) oxide= V205 34. What incorrect information is given by the formula MgOH2, instead of the correct formula, Mg(OH)2? - They didn’t put parenthesis which will show hydrogen has 2 atoms. But they mentioned hydroxide to have 2 atoms.