**Mole Problems**

**Calculate the molar mass of the following compounds**

1. K3AsO4
2. Na2B4O7.10 H2O
3. MnCl2.4 H2O
4. Al2(SO4)3
5. N2O5

**Calculate the mass in grams of each of the following:**

1. 0.354 mol of ammonia, NH3
2. 6.38 mol of O2
3. 0.354 mol of platinum metal, Pt
4. 4.00 mol of Al
5. 0.354 mol of cholesterol, C27H46O

**Calculate the number of moles in each of the following:**

1. 50.0 g of Borazon, BN
2. 188.0 g of Zn
3. 50.0 g of thallium sulfate, Tl2SO4
4. 160.0 g of Br2
5. 293.0 g of Fe

**Calculate the number of atoms, molecules, or ions for each of the following:**

1. 2.00 mole of Na, number of atoms
2. 46.0 g of Na, number of atoms
3. 3.00 mole of K+, number of ions
4. 68.0 g of H2S, number of molecules
5. 20.0 g of Ca, number of atoms

**Calculate the number of grams in each of the following:**

1. 6.02 X 1023 atoms of Na
2. 3.01 X 1023 molecules of Sr(OH)2
3. 1.20 X 1024 molecules of CO2
4. 1.50 X 1023 ions of Na+
5. 3.01 X 1023 atoms of S

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