$\qquad$

Determine the percent composition of each element in each of the compounds below.

| 1. $\mathrm{KMnO}_{4}$ | Name of the compound= | GFM of the compound: |
| :---: | :---: | :---: |
| $\% \text { K = }$ |  |  |
| \% Mn = |  |  |
| \% $\mathrm{O}=$ |  |  |
| HCl | Name of the compound= | GFM of the compound: |
| \% H = |  |  |
| \% $\mathrm{Cl}=$ |  |  |
| 3. $\mathbf{M g}\left(\mathrm{NO}_{3}\right)_{2}$ | Name of the compound= | GFM of the compound: |
| $\% \mathrm{Mg}=$ |  |  |
| $\% N=$ |  |  |
| \% $\mathrm{O}=$ |  |  |
| 4. $\left(\mathrm{NH}_{4}\right)_{3} \mathrm{PO}_{4}$ | Name of the compound= | GFM of the compound: |
| \% N = |  |  |
| \% H = |  |  |
| \% P = |  |  |
| \% $0=$ |  |  |
| 5. $\mathrm{Al}_{2}\left(\mathrm{SO}_{4}\right)_{3}$ | Name of the compound= | GFM of the compound: |
| \% AI = |  |  |
| \% S = |  |  |
| \% $\mathrm{O}=$ |  |  |

Solve the following problems using your knowledge of gram formula mass and percent composition. (Show all work)
6. How many grams of oxygen can be produced from the decomposition of 100 g of $\mathrm{KClO}_{3}$ ?
7. How much iron can be recovered from 25.0 g of iron (III) oxide $\left(\mathrm{Fe}_{2} \mathrm{O}_{3}\right)$ ?
8. How much silver can be produced from 125 grams of Silver (I) sulfide $\left(\mathrm{Ag}_{2} \mathrm{~S}\right)$ ?

