1. Find the percent composition of each element in the following compounds.

|  |  |
| --- | --- |
| 1. MgO
 | 1. Ba(NO3)2
 |
| 1. Na2SO4
 | 1. Li2Cr2O7
 |

1. What is the percent of water in copper (ll) sulfate pentahydrate?
2. A metal M forms an oxide M2O3 containing 68.4% of the metal by mass. What is the metal, M?
3. 4.00 grams of calcium is used to make CaBr2. Calculate how many grams of bromine are required for the reaction
4. using moles
5. using the concept of percent composition
6. Sodium carbonate exists as a decahydrate. If 12.00 grams of sodium carbonate decahydrate are dehydrated, what mass of sodium carbonate will remain? Solve the problem two ways, using moles, and using percent composition.
7. For the following two questions, solve by using the method you understand the best: solve by moles or solve by percent composition.
8. What mass of potassium bromate, KBrO3 can be made from 5.67 g of potassium?

1. How many grams of gold phosphide, Au3P, could be made from 5.00 g of gold?
2. There are two compounds of sulphur and oxygen, the first is 50.0 % sulphur, and the second is 40% sulphur. How much oxygen would combine with 5.6 g of sulphur in forming each compound? What is the formula for these compounds?