**Chemistry Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Hydrate Calculations Worksheet Period\_\_\_\_\_\_**

1. Find the formula for the following hydrates.
2. 0.391 g Li2SiF6, 0.0903 g H2O
3. 0.737 g MgSO3, 0.763 g H2O
4. 95.3 g LiNO3, 74.7 g H2O
5. 76.9% CaSO3, 23.1% H2O
6. 89.2% BaBr2, 10.8% H2O

**Chemistry Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Period\_\_\_\_\_\_**

**Hydrates**

1) How is a hydrate different from other chemical compounds?

2) Define the following terms:

* anhydrate
* dehydration

3) Name the following compounds:

a) FeCl3. 6 H2O \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) CuSO4 . 5 H2O \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) Write the formulas for the following compounds:

a) barium chloride dihydrate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) magnesium sulfate heptahydrate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5) What is the percent composition of water in the compound in problem 4b?

6) If 125 grams of magnesium sulfate heptahydrate is completely dehydrated, how many grams of anhydrous magnesium sulfate will remain?