Chemistry I Name _____

Date _____ Per ____

# Hydrates Practice Problems

Directions: Solve the following. Show all your set-ups. Remember sig figs and units in you answer.

1. What is the molecular mass of the hydrate sodium carbonate decahydrate? (That's $Na_2CO_3 \cdot 10H_20$ , aka washing soda.)

2. What is the percent of water in the hydrate $Na_2CO_3 \cdot 10H_20$?

3. How many moles of water would there be in .0987 moles of $Na_2CO_3 \cdot 10H_20$?

4. How many grams of water would there be in 351 grams of $Na_2CO_3 \cdot 10H_20$?

5. When 678 grams of a hydrate of $NaAl(SO_4)_2$ is heated, 358 grams of the anhydrous salt is left. What is the formula for the hydrate of $NaAl(SO_4)_2$?