

NO CREDIT IF YOU: Fail to put in the Units & Properly Round, Fail to show ALL math work

Max Grade: 103 points

PRINT NAME ON LINE _____

CHECK CORRECT BOX OR LOOSE 20 PTS

Test End time _____

Wed Afternoon Lab

Test Start time _____

Wed Evening Lab

(1 pt) Test Elapsed time _____

A. (10 * 2 Points each = 20 pts) Fill in the Blanks:

<u>Name</u>	<u>Formulae</u>	<u>Solubility in Water</u>
1. Cobalt (III) Carbonate	_____	_____
2. Calcium Chloride	_____	_____
3. Magnesium Phosphate	_____	_____
4. Ammonium Sulfide	_____	_____
5. Aluminum Sulfate	_____	_____

B. (5 * 4 Points each = 20 pts) Answer the following:

1. Write a Chemical Reaction and label the Reactants

2. In the following Reaction: $2 \text{H}_2 + \text{O}_2 \rightarrow 2 \text{H}_2\text{O}$ The "2" in front of the H_2O is called a:

3. Name the "Driving Forces" of a reaction

4. What is a "Strong Electrolyte"

5. What is the products from the reaction of a strong acid and strong base?

C. Write the equations for the following reactions and will they go to completion:
(4 * 10 Points each = 40 pts)

Magnesium and Hydrochloric Acid

Sodium Bromide reacting with Magnesium Nitrate

Hydrochloric Acid reacting with Potassium Hydroxide

Silver Nitrate reacting with Lithium Bromide

E. (2 * 5 Points each = 10 pts) Calculate % Composition of each element in

Sodium Bicarbonate

Chloroform – CHCl₃

F. (2 * 5 Points each = 10 pts) Calculate the Empirical & Molecular formulae for:

1. C = 79.23%, H = 5.70%, Mw is between 100 – 110 g/mole

