Stoichiometry Reinforcement (S332.5.4) Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chem 332 – O’Dette Date \_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_

1. Based on the reaction seen below:

2 Ag2CO3 4 Ag + O2 + CO2

* 1. What is the mole ratio between the Ag and the Ag2CO3?
  2. If we produce 5.0 moles of Ag, how many moles of Ag2CO3 should we start with?
  3. If we start with 6.32 g of Ag2CO3, how many moles of Ag will be produced?
  4. If we want to produce 6 g of O2, how much mass of Ag2CO3 should we start with?

1. If you start with 20.1 g of H2, how many molecules of HCl will be produced based on the following reaction?

H2 + Cl2 2 HCl

1. When sodium iodide reacts with lead (II) nitrate in a double replacement reaction, how much volume, in mL, of 6.2 M NaI will be needed to produce 47 g of lead (II) iodide?

Answers: 1a)4:2 1b)2.5 moles 1c)0.0458 moles 1d)100 g 2)1.20x1025 molecules 3)33 mL