

Unit 4 – Chapter 4: Types of Reactions

Name _____

Practice problems: Dilutions & Precipitate Reactions

Period _____

- 1) A standard solution is prepared for the analysis of fluoxymesterone ($C_{20}H_{28}FO_3$), an anabolic steroid. A stock solution is first prepared by dissolving 10.0 mg of fluoxymesterone in enough water to give a total volume of 500.0 mL. A 100.0 μ L aliquot (portion) of this solution is diluted to a final volume of 100.0 mL. Calculate the concentration of the final solution in terms of molarity.

- 2) When the following solutions are mixed together, what precipitate (if any) will form?
 - a. $Hg_2(NO_3)_2(aq) + CuSO_4(aq)$
 - b. $Ni(NO_3)_2(aq) + CaCl_2(aq)$
 - c. $K_2CO_3(aq) + MgI_2(aq)$
 - d. $Na_2CrO_4(aq) + AlBr_3(aq)$