

Name _____ Block: _____ Date: _____

Chemistry 12
INTRO TO SOLUBILITY

- Decide whether each of the following substances is expected to form an IONIC (I) or MOLECULAR (M) solution.
 - RbBr(s) _____
 - CsNO₃(s) _____
 - S₈(s) _____
 - NaCH₃COO(s) _____
 - HNO₃(l) _____
 - CHCl₃(l) _____
 - CuSO₄(s) _____
 - CrCl₃(s) _____
 - ICl(s) _____
 - CH₄(g) _____
- Write equations to show the **dissolving** of the following substances in water.
 - (NH₄)₂SO₄(s) _____
 - CH₃CH₂OH(l) _____
 - K₂CO₃(s) _____
 - CaCl₂(s) _____
- Write equations for the equilibrium reaction existing in each of the following saturated aqueous solutions
 - K₃PO₄ _____
 - NH₄Cl _____
 - Al(NO₃)₃ _____
- Write the **crystallization reaction** involving MgBr₂(s).
- Write the **dissolving reaction** involving C₆H₁₂O₆(s).
- A flask contains a saturated solution of NaCl in water. You carefully pour off 100 mL of the solution, taking care to not let any crystals of salt fall into the new container. Is the salt solution in the new container saturated? Why?
- A student half-filled a 100 mL beaker with water and added a few grams of NaCl crystals. Seeing the crystals settle immediately to the bottom of the beaker, the student said the solution was saturated because some undissolved solid was present. Was the student correct? Why?