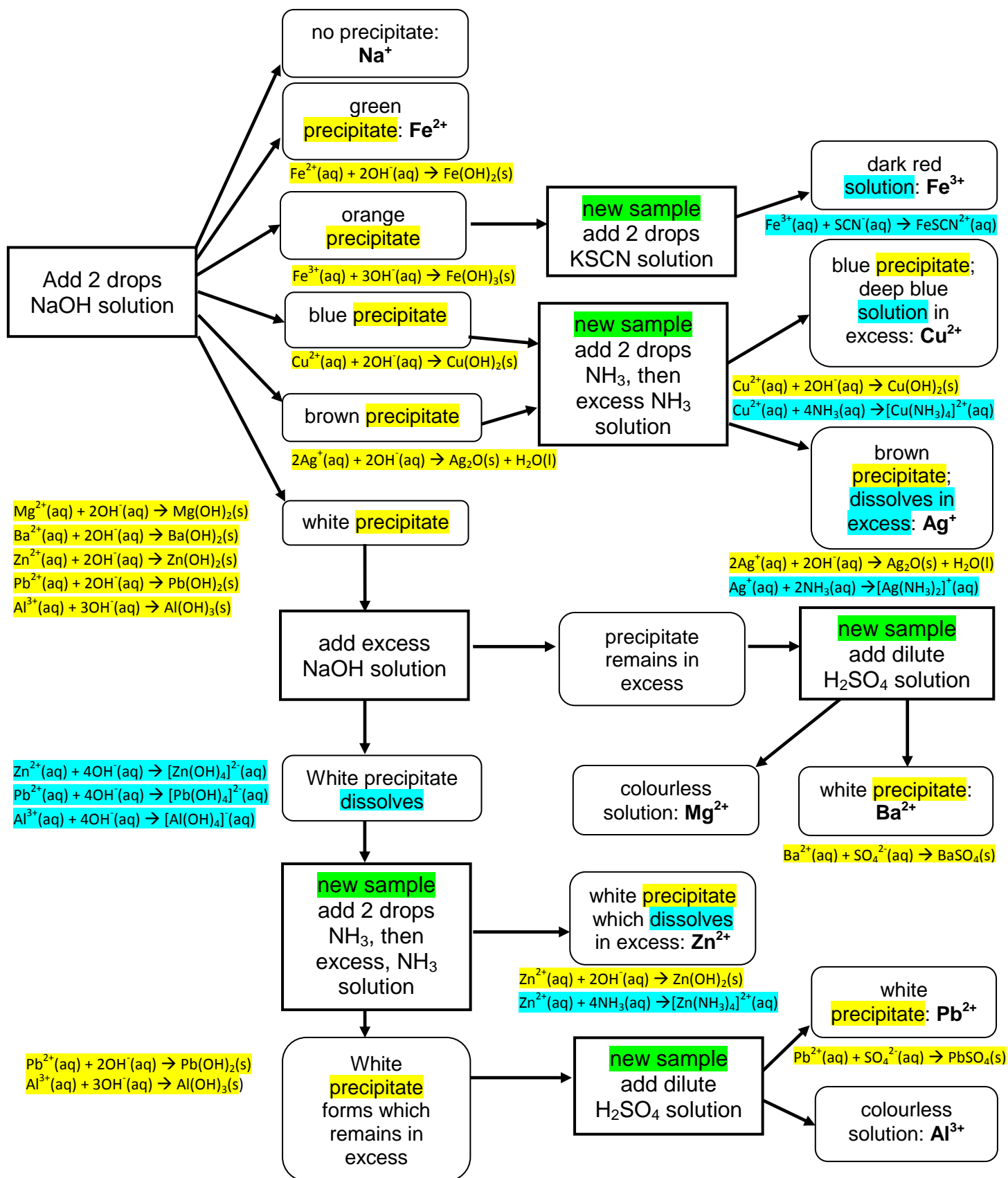
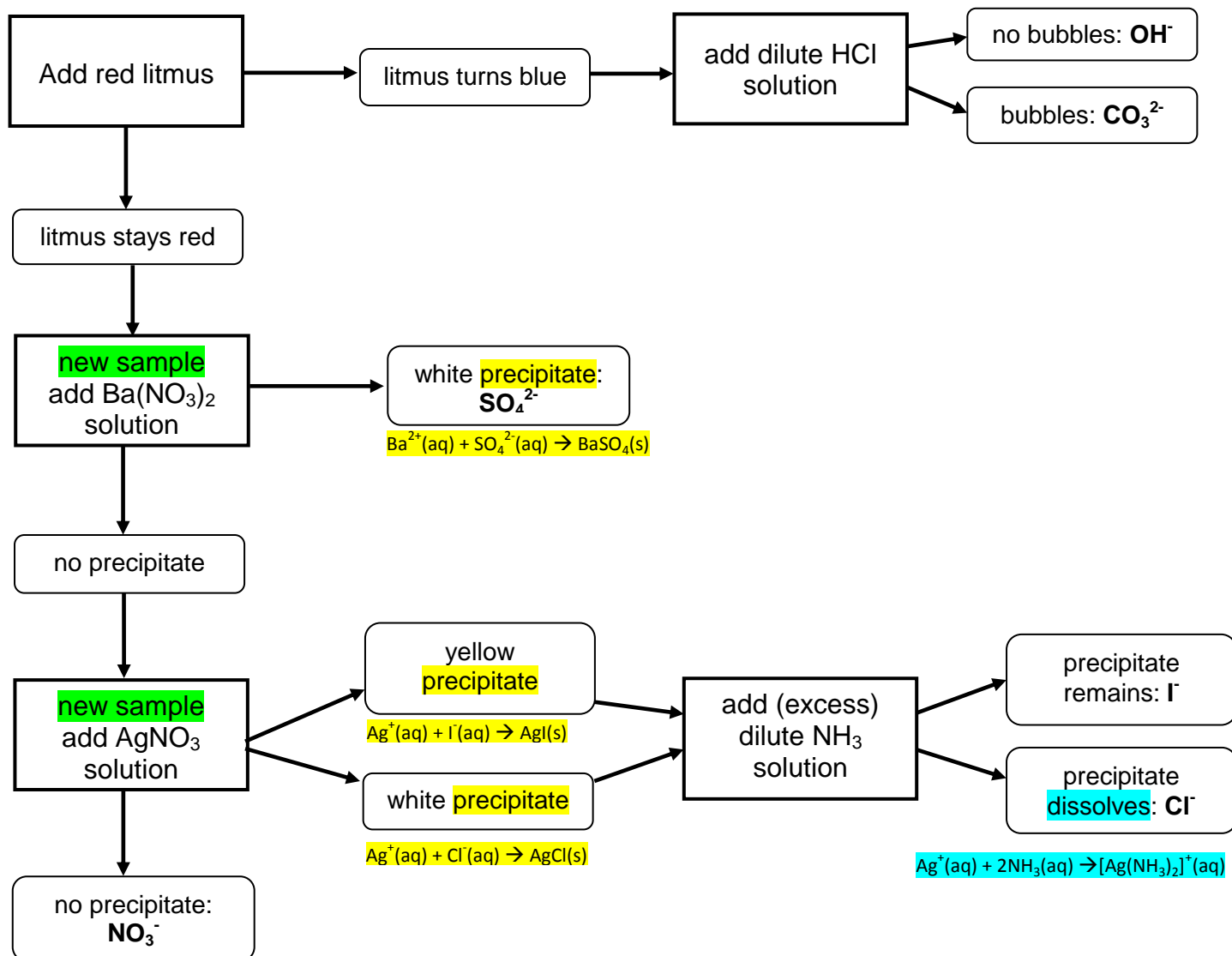


AS 91162: Carry out procedures to identify ions present in solution

Testing for cations flow chart: Ag^+ , Al^{3+} , Ba^{2+} , Cu^{2+} , Fe^{2+} , Fe^{3+} , Mg^{2+} , Pb^{2+} , Na^+ , Zn^{2+}



Testing for anions flow charts: Cl^- , CO_3^{2-} , I^- , NO_3^- , OH^- , SO_4^{2-}



Note: This is an adaptation of the flow chart provided by NZQA but the equations are still the same. Many schools use barium nitrate in place of barium chloride solution to test for a sulfate.

However, the order of the original NZQA/NCEA flow chart would produce a white precipitate of silver sulfate when a "sulfate" unknown is added to silver nitrate; this precipitate could therefore be mistaken for a chloride (if judged to dissolve in NH_3) or as an iodide, despite not being yellow (if judged not to dissolve in NH_3). Either way it's a confusion that can be avoided!

Internal assessment resource Chemistry 2.2A for Achievement Standard 91162
PAGE FOR STUDENT USE

Student Resource A:

Testing for anions flow charts: Cl^- , CO_3^{2-} , I^- , NO_3^- , OH^- , SO_4^{2-}

