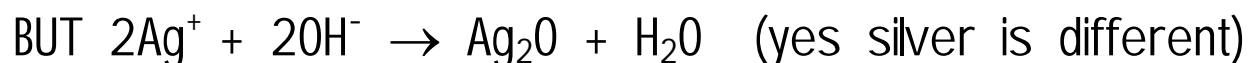
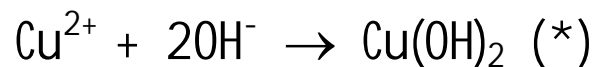
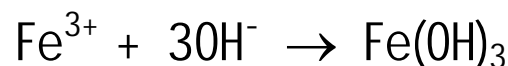
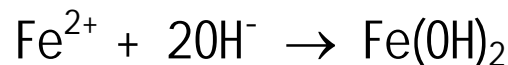
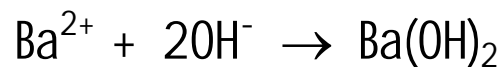
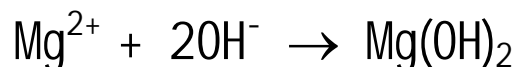
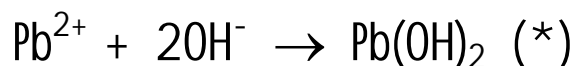
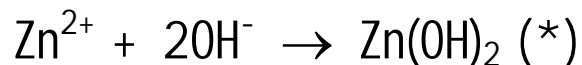
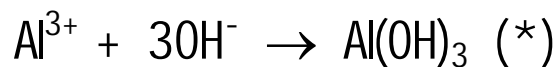


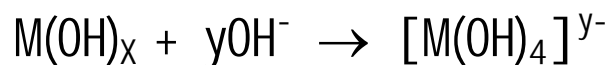
Formation of precipitates with either 2 drops of NaOH (or 2 drops of ammonia solution) (*)

Metal ion + hydroxide ion → metal hydroxide precipitate

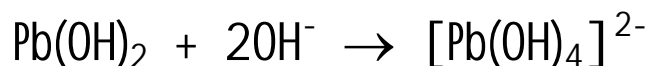
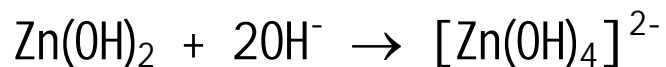
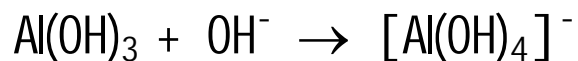


White hydroxide precipitates that dissolve in excess NaOH forming complex ions

Metal hydroxide + hydroxide ion → soluble complex ion

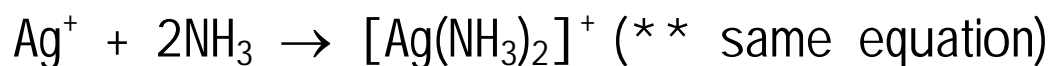
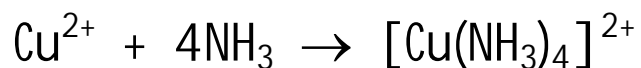
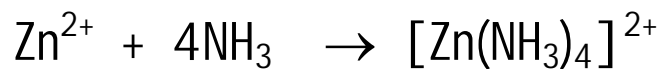


$$x + y = 4$$

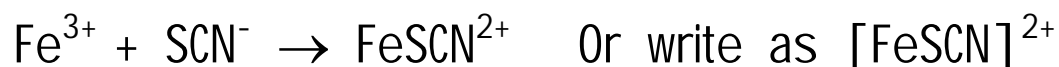


Precipitates that dissolve in excess ammonia solution

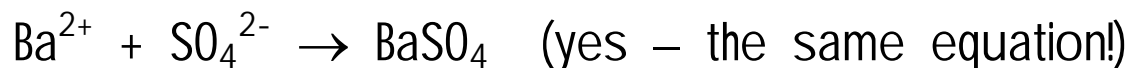
Precipitates of zinc hydroxide, copper hydroxide, silver oxide** and silver chloride**



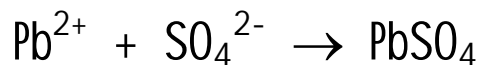
Test to confirm Fe³⁺



Test to identify barium ion / test to identify sulfate ion



Test to identify lead ion



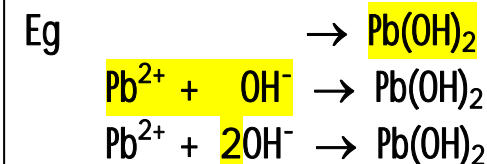
Test to identify chloride or iodide ion



HINT BOX

Write the equations for formation of precipitates backwards

- Product
- Reactants
- Balance it



Write the equations for formation of the complexes backwards

- Product
- Reactants
- Balance it

