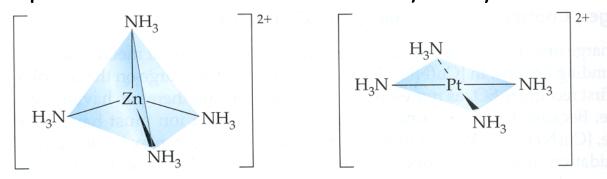
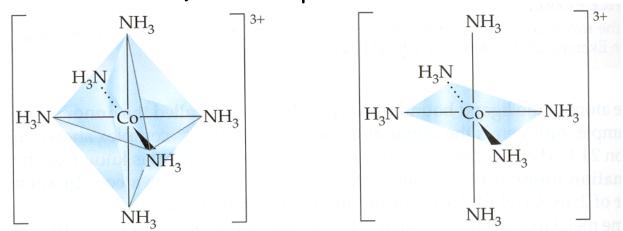
## Metals and their Compounds Lecture 7.3

## Coordination compounds

Metal coordination complexes have *shapes* which are specific, e.g. for complexes with *four* ligand atoms attached (*4-coordinate ions*), the complexes can be *tetrahedral* or *square-planar* 



For complexes with six ligand atoms attached (6-coordinate ions) the complexes are octahedral



The fact that complexes have specific shapes leads to the occurrence of *isomers* - these have same *formula* but are *different* compounds.