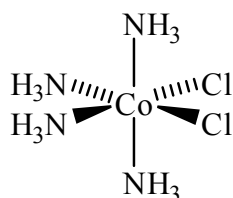
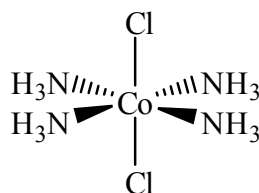


- Coordination complexes can display a number of types of isomerism. Draw a simple diagram showing a pair of geometric isomers. Label your diagram with the systematic name of each isomer.

The compound $[\text{CoCl}_2(\text{NH}_3)_4]$ can exist as in two isomeric forms which differ in the arrangement of the ligands in space.

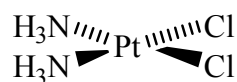


cis-tetraamminedichloridocobalt(II)

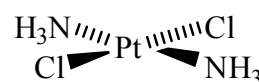


trans-
tetraamminedichloridocobalt(II)

$\text{Pt}(\text{NH}_3)_2\text{Cl}_2$ can also exist as *cis* and *trans* isomers:



cis-diamminedichloridoplatinum(II)



trans-
diamminedichloridoplatinum(II)