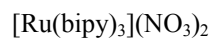
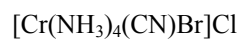
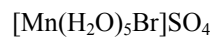
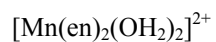
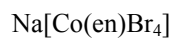
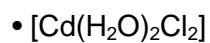
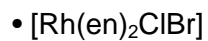
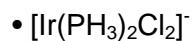


Name:

1. Name the following compounds:



2. Draw structures of the following complexes and identify those that may exist as geometric isomers:



3. In metal complexes the ligands which are attached to the metal centre may be classified as either **monodentate** or **polydentate**.
- What do the terms monodentate and polydentate mean. Explain the key features of a polydentate ligand using a trien iron complex as an example - include the **donor atoms** and the **chelation effect** in your answer.
4. Describe the bonding in transition metal coordination complexes using a Lewis acid / Lewis base description of **coordinate covalent bonding**.
- Sketch a tetrahedral zinc complex to illustrate your answer.
5. What is **hemoglobin** and how does it function at a molecular level as an oxygen transport protein?