CH 223 Chapter Nineteen Study Guide

- Identify the transition elements, the *d*-block elements, the lanthanide elements, the actinide elements, and the *f*-block elements. Be able to predict properties for each of these classifications.

- Know how to determine if an element is paramagnetic or diamagnetic.

- Be able to describe and identify coordination compounds. Know how to determine the oxidation number for a coordination compound.

- Know what a ligand is and whether it is monodentate, bidentate or polydentate.

- Understand why there are no cationic coordination compounds.

- Know what EDTA is.

- Know how to systematically name coordination complexes using the rules outlined in the handout.

- Be able to determine the coordination number for a coordination compound. Know the differences between octahedral, square planar and tetrahedral complexes.

- Understand the definition of an isomer. Realize that there are two types of isomers, both geometrical and optical.

- Know the terms *cis*, *trans*, *mer*, and *fac*. Know how they apply to isomerism in coordination compounds.

- Be able to solve and understand the assigned problems in problem set #6.