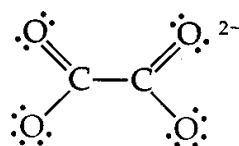
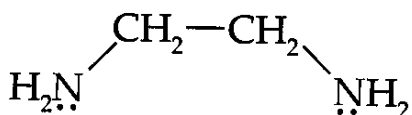


Metals and their Compounds

Lecture 7.2

Coordination compounds

Some ligands have several atoms with lone pairs which can all "bite" simultaneously to a metal ion. These are known as *bi-dentate* ("two toothed") or generally *multi-dentate* ("many toothed"). They are also known as *chelate* ("crab-like") ligands. bi-dentate ligands are ethylene diamine (en) or oxalate ions



Oxalate ion

An example of a multi-dentate ligand is ethylene diamine tetra-acetic acid (EDTA)

