

Metals and their Compounds

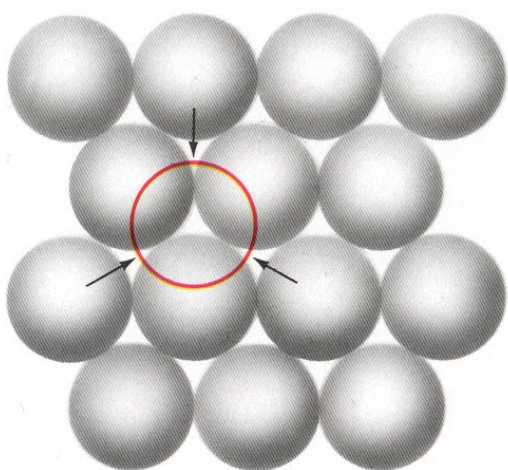
Lecture 4.1

Simple ionic solids

Metals have atoms of *same size*, so packing of metals atoms is easiest to understand. Ionic solids like Na^+Cl^- (common salt) are also based on same *principles*, but in general the positive *cations* are smaller than the negative *anions*.

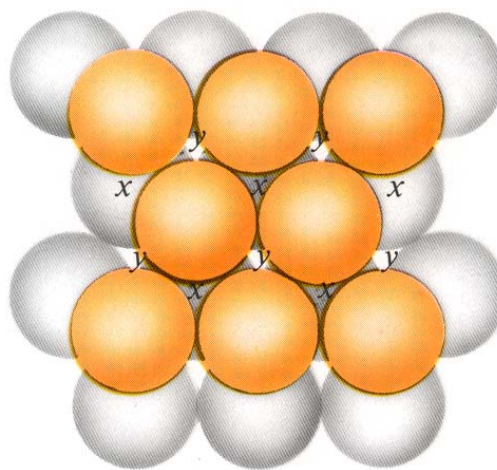
Concept of holes : A close packed lattice of like sized spheres has two types of holes :

Tetrahedral holes



B

Octahedral holes



C