

This leads to a higher yield stress
& a harder material; e.g. steel vs. iron
when the impurity is carbon in steel.

e) Point defects

 Vacancy

 Interstitial Atom (Carbon in steel)

 Substitutional Atom (Zn in Cu)
 (Small or large)

 Frenkel defect

 Schottky defect

 Screw Dislocation

 Edge Dislocation

 Mixed Dislocation

 Twining surface defect

 Grain Boundary

 Small angle or large angle