Point defects in a crystal lattice

- **perfect lattice**
- **interstitial impurity**
- **cation vacancy**
- **anion vacancy**
substitution of a cation

substitution of an anion

B_A antisite defect

A_B antisite defect
Dislocation in a crystal lattice

Schematic representation of the (100) and (111) faces of a face centered cubic (fcc) lattice showing the relationship between the close packed rows

\[ \frac{a}{\sqrt{2}} \]