Bonding in Metals

Metals are made of closely packed cations rather than neutral atoms.

The valence electrons of metal atoms can be modeled as a sea of electrons. That is, because metals conduct electricity, valence electrons are mobile and move around different parts of the metal. **Metallic bonds** - the attraction of free floating valence electrons.

Many of the properties of metals (conductors, malleable, ductile) can all be explained by the idea of how freely the valence electrons move about.

Crystalline Structures and Alloys

*Read the sections for these two topics on pages 202 and 203.

Briefly summarize each topic in your notes

Bonding in Metals

Work on Questions 12-29 on pages 196,199, and 203