

Ionic compounds

- gain/lose electrons
- form between metals and nonmetals
- hard, brittle crystals
- high boiling & melting points
- when dissolved in water or melted, they conduct Electricity
- solids at room temperature
- strong bonds

Covalent compounds

- share electrons
- form between metals
- typically water and gases
- lower boiling and melting points
- do not conduct electricity
- gases, liquids, or low melting solids
- weak bonds

Metallic bond: An attraction between a positive metal ion and the electrons surrounding it.

Alloy: Material made of two or more elements that has the properties of a metal.

Ex: bronze, brass and steel

Metals

- conduct electricity & heat
- ductile & malleable
- shiny & reflective

Nonmetals

- poor conductors of heat & electricity
- brittle
- dull