

## Topics: Metals and Non-Metals

### Subtopics: Physical Properties of Metals and Non-metals

#### Metals

##### Physical properties

- Shining surface (in pure state) [called metallic lustre]
- Generally hard [varies from metal to metal]
- Malleable [i.e. can be made thin sheets by beating]
- Ductile [i.e. can be drawn into thin wires]
- Good conductors of heat
- High melting point
- Conduct electricity
- Produce sound [some metals; these are called sonorous]

#### Non-metals

Non-metals are found in all the three states i.e. solid, liquid and gas, at room temperature.

Iodine (non-metal) has lustre

Carbon has allotropes (exists in different forms)

o Diamond is hard

o Graphite (Conducts electricity)

Metals	Non-metals
Generally, these are hard and lustrous.	These are soft and have no lustre.
These are malleable and ductile (Malleable: can be beaten into sheets; Ductile: can be drawn into wires).	These are non-malleable and non-ductile.
These are sonorous (produce ringing sound when struck).	These are not sonorous.
These are good conductors of heat and electricity.	These are poor conductors of heat and electricity.