

Metals and Non-metals

Physical properties of metals:

- i) Metals in their pure state, have a shining surface. This property is called metallic lusture.
- ii) Metals are generally hard. The hardness varies from metal to metal
- iii) Metals can be beaten into sheets. This property is called malleability.
- IV) Metals can be drawn into thin wires. This property is called ductility.
- V) Metals are good conductors of heat and have high melting point.
- VI) Metals are good conductors of electricity.
- VII) Metals are sonorous.

Physical properties of nonmetals

- i) Non-metals have rough, non-shiny surface.
- ii) Non-metals are generally soft.
- iii) Non-metals are non-malleable.
- IV) Non-metals are non-ductile.
- V) Non-metals are poor conductors of heat.
- VI) Non-metals are poor conductors of electricity.
- VII) Non-metals are non-sonorous.

Exceptions in physical properties of metals and non-metals:

- i) Mercury (metal) is liquid at room temperature.
- ii) Gallium and Caesium have very low melting point. These melt even on our palm.
- iii) Iodine is a non-metal but it is lustrous.

iv) Carbon is a non-metal that can exist in different forms. Each form is called an allotrope. Diamond, an allotrope of carbon is the hardest natural substance known and has very high melting and boiling point. Graphite, another allotrope of carbon is a conductor of electricity.

v) Alkali metals (Lithium, Sodium, potassium) are so soft that they can be cut with a knife. They have low densities and low melting point.