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STUDY MATERIAL SCIENCE

CLASS-VIII

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▶ Metals & Non Metals

Physical Properties of Metals:

- hard to touch.
- lustrous i.e., freshly Cut surfaces of metals have characteristic shining.
- malleable; the property of metals by which they can be beaten into thin sheets is called malleability.
- ductile; the property of metal by which it can be drawn into wires is called ductility.
- sonorous i.e., metals produce ringing sound when struck on a hard surface.
- Good conductors of heat and electricity.

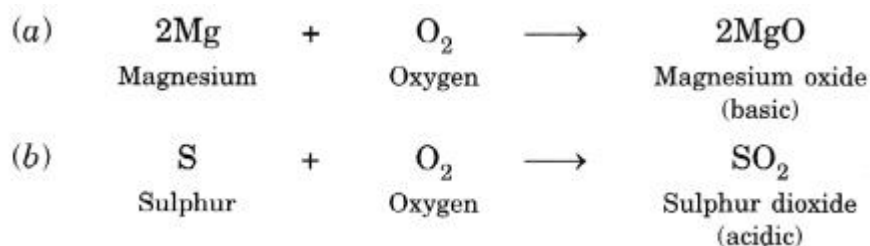
Metals like sodium and potassium are soft and can be cut with a knife. Mercury is the only metal which is found in the liquid state at room temperature.

Physical Properties of Non-metals:

- Non-metals are soft and dull (e.g., coal and sulphur).
- Non-metals are generally brittle, i.e., they break down into a powdery mass on tapping with a hammer.
- They are not sonorous.
- They are poor conductors of heat and electricity.

Chemical Properties of Metals and Non-metals:

Reaction with Oxygen: Both metals and non-metals when burnt in oxygen form their oxides. Oxides of metals are basic in nature while that of non-metals are generally acidic in nature e.g.,



Reaction with Water: Some metals react with water to produce metal hydroxide and hydrogen gas. Generally, non-metals do not react with water.



Reaction with Acids: Metals react with dil. acids and produce metal salt and hydrogen gas. Generally, non-metals do not react with dil. acids.