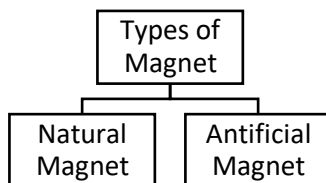


A magnet is a material that produces a magnetite field, which attracts the material tale iron, cobalt, nickel, steel, etc.



Natural Magnet: Lodestone or magnetite is a piece of magnetic material which are found in earth naturally.

Artificial Magnet: Magnets which are made artificially or made by humans. e.g. horse-shoe magnet. bar magnet, etc.

Uses

- in electric motor, fan, etc
- in door bells, refrigerators, compass, etc
- in magnetic game boards. in credit/debit and ATM cards.
- Magnetic materials Which are attracted by a magnet. e.g. iron, cobalt etc.
- Non-magnetic material which are not attracted by a magnet. e.g. wood, glass, etc.

Properties of Magnets

- a magnet always have two poles, north pole and south pole.
- magnetic strength is maximum at poles.
- freely suspended magnet always comes to rest in North - South direction
- magnetic poles cannot be isolated.
- like poles repel and unlike poles attract each other.

Methods of making artificial magnets.

- **Stroking method** - an iron nail can be made into a magnet by stroking it several time with a strong magnet.
- By using electricity, when electric current is passed through a coil wound around a steel rod, it behaves like a magnet.

Cautions While handling Magnets

- Magnets must notate hammered or dropped.
- By heating it for a long time, it can demagnetised the magnet
- It should be kept away from electronic devices.

Storage of Magnet

- Bar magnet should always be stored in pairs between soft iron pieces called keepers.
- Horse shoe magnet needs only one keeper.