

Magnets

Properties of magnets

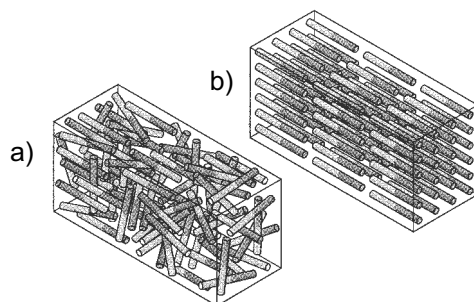
1. Magnets have poles: apole und apole.
..... poles repel each other, poles attract.
The magnetic force is at the ends of the magnet.

2. Permanent magnets and ferromagnetic materials (.....
.....) always

3. If you break a bar magnet in half, each half still behaves as
.....
Magnetic poles cannot be

Magnetisation

Magnets and ferromagnetic materials contain magnetic domains. If the magnetic domains are, the material is magnetised.



a)

b)

If a permanent magnet is or,
the magnetic domains are brought out of alignment and the magnet becomes weaker.

Soft magnetic materials:

Hard magnetic materials:

Magnetic fields

A magnetic field is the space surrounding a magnet where other magnets experience a force.

Field line pattern: Representation of a magnetic field by drawing arrows. The direction of the field lines shows the direction in which a magnetic pole is pushed.

Examples:

