

Lecture 7

Magnetic Field and Magnetic Force

Chapter 19.1 - 19.6

Outline

- Magnets
- Magnetic Field
- Magnetic Force
- Motion in a Magnetic Field

Magnets

The simplest magnet is a somehow magnetized bar of iron. It attracts and holds other pieces of iron. Most of the force a magnet exerts from its ends.

A magnet's ends point **north and south**. The north-pointing end is called the **north pole**. The south-pointing end is called the **south pole**.

magnet

Magnetic Poles

Positive and negative charges in neutral matter can be separated from each other.

The north and south magnetic poles **cannot** be separated.

Every time we saw a magnet in half, it gets the 2 poles.

Magnetic properties have all substances, but to a different extent. Iron is one of the best magnets.