

PHYSICS PROJECT

Magnetism

Poles, fields and everyday uses

PRESENTED BY
Student Name

SUBJECT
Physics

CLASS / YEAR
Class XI



Agenda

01 Introduction

02 Concepts

03 Experiment

04 Applications

05 Summary



Image

What is magnets?

Magnetism is the force by which magnets attract iron and attract or repel other magnets.

Every magnet has a north and a south pole. Like poles repel and unlike poles attract. The space around a magnet where its force acts is its magnetic field.



Diagram

Key concepts

01

Poles

North and south ends of a magnet.

02

Magnetic field

Region where the force acts.

03

Electromagnet

A coil that becomes a magnet with current.

Magnetic or not?

Object	Material	Attracted?
Paper clip	Steel	Yes
Coin (most)	Alloy	Varies
Pencil	Wood	No

Reference values for illustration.

Experiment

- Sprinkle iron filings on paper over a magnet
- Tap the paper gently
- Observe the field pattern
- Draw the field lines

SAFETY

Keep magnets away from phones and cards.

Real-world applications



Image 1

Compass

Navigation



Image 2

Motors

Fans and vehicles



Image 3

Medical

MRI scanners

Quick facts

2

poles in every magnet

Earth

behaves like a giant magnet

Maglev

trains float on magnets

Summary

- Magnets have two poles
- Like poles repel, unlike attract
- Fields can be seen with iron filings
- Current can create magnetism



Image

Thank you

Questions?

Student Name · Physics