



Bal Bharati

PUBLIC SCHOOL

M A N E S A R

Science Club Report: MagnetoLab – The Power of Invisible Forces

Date: 19/07/2025

Organized by: Science Club

Teacher In-charge: Divyangi Goswami

Objective:

The aim of the session “MagnetoLab – The Power of Invisible Forces” was to help students explore the fascinating world of magnetism through hands-on activities and understand how invisible magnetic forces can create visible and interactive effects.

Activities Conducted:

1. Magnetic Levitating Pen

Students observed and experimented with a specially designed setup where a pen remained suspended in air due to magnetic repulsion. This activity sparked curiosity about how like poles repel and how magnetic fields can be harnessed for levitation and stabilization.

- Learning Outcome:
- Students understood the concept of magnetic repulsion, magnetic field interaction, and how magnetic levitation is used in real-world technologies like Maglev trains.

2. Magnetic Tracer

Students used a horseshoe magnet and iron filings to visualize magnetic field lines. They created intricate patterns that revealed the structure of magnetic fields, especially around the poles.

- Learning Outcome:
- The tracer activity helped students visualize the otherwise invisible magnetic field and enhanced their understanding of how magnets influence their surroundings.

Highlights:

- Hands-on experience with real magnetic phenomena
- Students worked in small groups, encouraging teamwork and inquiry-based learning

- Visual and interactive demonstration made complex concepts simple and exciting
- Created engaging discussions about the application of magnetism in daily life

Conclusion:

The MagnetoLab activity successfully brought abstract magnetic concepts to life. By experimenting, collaborating, and discovering, students deepened their understanding of the “invisible forces” that play a vital role in science and technology.

