

Types of Forces

Chapter 5: Exploring Forces · Topic 1

Key Concept

Gravitational force pulls all objects with mass towards each other, most noticeably Earth pulling objects downward. Magnetic force acts between magnets or magnetic materials even without touching, and electrostatic force acts between charged objects, like a comb attracting small bits of paper after being rubbed on hair. Understanding whether a force is contact or non-contact helps explain many everyday phenomena, from why a ball falls (gravity) to why a balloon sticks to a wall after rubbing (electrostatic force).

Quick Revision Notes

- Contact forces: muscular force, friction, applied mechanical force.
- Non-contact forces: gravitational, magnetic, electrostatic force.
- Gravity pulls objects with mass towards each other (Earth pulls objects downward).
- Electrostatic force explains phenomena like a rubbed balloon sticking to a wall.

Practice Questions

- 1 Classify friction and magnetism as contact or non-contact forces.
- 2 Give one example each of a contact force and a non-contact force from daily life.
- 3 Explain why gravity is considered a non-contact force.