

Types of Forces

Name:

Date:

INQUIRY

The Shanghai Maglev floats above the track using magnetic force. Is this a contact or non-contact force?

Discuss with your partner. Write your initial ideas below:

Key Vocabulary

Term	Definition
Force	A push or pull measured in Newtons (N).
Contact force	Requires touching: friction, tension, normal.
Non-contact	Acts at distance: gravity, magnetism, electrostatic.

Part A — Classifying

1. Classify as contact or non-contact: (a) friction (b) gravity (c) air resistance (d) magnetism (e) tension (f) electrostatic. [3 marks]

2. Draw a force diagram for a book on a table. Label all forces. [3 marks]

Part B — Application

3. The Shanghai Maglev uses magnetic force to float. (a) Contact or non-contact? (b) Why does this allow 430 km/h speeds? [3 marks]