

# Magnets at work

## Lesson at a glance

Open by holding up a steel tray with a picture stuck on by a fridge magnet and invite guesses about what keeps it up. Name the big idea magnet job, then model thinking aloud that this magnet's job is holding. Groups rotate through two stations — holding pictures on a tray and catching paperclips with magnet wands — then return to the carpet to name the jobs they tried. Close by letting children click a magnetic-catch box shut so the class meets the closing job on a real object.

## Learning objectives

- Explore at least two everyday magnet jobs hands-on
- Name the job a magnet is doing in a simple example
- Talk about how magnets help us in daily life

## Before the bell – prep

Test the baking tray the night before: fridge magnets must hold firmly, or swap for a filing-cabinet side. Set Station A (tray, chunky fridge magnets, paper pictures) and Station B (shallow tray of paperclips/washers, magnet wands). Tape a floor line at Station B. Keep the magnetic-catch box packed for the carpet demo.

**Materials**

| Item                                                                                           | Qty | Per   | Source        | Low-cost substitute                                                       |
|------------------------------------------------------------------------------------------------|-----|-------|---------------|---------------------------------------------------------------------------|
| chunky fridge magnets                                                                          | 6   | class | classroom     | large craft magnets from a euro shop (still chunky, never button magnets) |
| steel (magnetic) baking tray — test with a fridge magnet before the lesson                     | 1   | class | classroom     | the side of a metal filing cabinet or a magnetic whiteboard strip         |
| small paper pictures or name cards                                                             | 8   | class | classroom     | scrap paper squares the children decorate                                 |
| small box or tin with a magnetic catch                                                         | 1   | class | hardware shop | a pencil tin or glasses case that already has a magnetic snap             |
| chunky magnet wands                                                                            | 4   | class | school kit    | chunky bar magnets held in adult-supervised hands                         |
| paperclips and small metal washers                                                             | 20  | class | classroom     | metal bottle caps cleaned and dried                                       |
| shallow tray for the fishing station                                                           | 1   | class | classroom     | a clean shoe-box lid                                                      |
| magnetic letter board with chunky magnetic letters (optional — second-adult side station only) | 1   | class | classroom     | a steel baking tray with chunky fridge-magnet letters                     |

**Safety watch-point**

Chunky magnets only; keep magnets and small metal pieces away from mouths. Teacher stays at the fishing tray the whole time. Count every magnet and wand back before tidy.

## Teaching moves

- **Getting Started:** Before children sit, stick one picture to the steel tray with a fridge magnet and hold it up. Ask what is keeping the picture up; take two or three guesses and do not name the magnet yet. Keep all station kit out of sight so eyes stay on the tray.
- **What jobs can magnets do?:** Point to the magnet still holding the picture. Say magnet job clearly and have the class repeat once. Think aloud the worked model: wonder, try, notice the pull, name the job as holding. Preview holding and catching only in speech — no board list of jobs yet.
- **Magnet job stations:** Four groups of 5–7; only two children handle kit at a time. Stay at Station B yourself because of small parts. Run the pair-turn routine at Station A with a magnet minder counting magnets flat between pairs. After about 5–6 minutes freeze, swap stations, and run the second round so every child tries holding and catching. Revoice with the two job words: holding and catching.
- **What job did you notice?:** Carpet circle. Hold up the fridge magnet and a wand as prompts. Think-pair-share first, then take four or five voices. Offer the starter My magnet was... and its job was... If a child only says it stuck, revoice as pulling and holding.
- **Magnets help us:** Priority first: pass the magnetic-catch box so two or three children open and shut it and the class hears the click. Name closing / keeping shut now for the first time. Only if time remains, link to bags, doors or toys from that solid example.
- **Tidy and finish:** Count every chunky magnet, wand and letter back into the tub before lining up; sweep the floor for paperclips and washers. One-line recap: magnets at work — holding, closing and catching.

## What it should show

Most Senior Infants will name holding at the tray and catching at the fishing tray, and will link each job to help (picture stays up; metal is picked up). After the catch-box click they add closing. A child who only says sticky can be gently steered to pull and lift-off-clean. Affirm everyday ideas like fridge doors, bag snaps and pencil-tin lids.

## Misconceptions & interventions

- **The magnet is sticky like glue — it sticks and stays messy.** — Let them lift the fridge magnet cleanly off the tray. Say glue sticks and stays messy; a magnet pulls and you can lift it off clean.
- **Every metal thing is a magnet.** — Hold up a paperclip beside the wand: the magnet does the pulling; the paperclip only gets pulled. Have them try the paperclip alone on the tray so nothing happens.

**Differentiation**

| Emerging                                                                                                                                                                                       | Developing                                                                                                                                                                                  | Proficient                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Offer the two station words orally while pointing at the real object: Is it holding or catching? Pair with a partner who models try-and-say.</li></ul> | <ul style="list-style-type: none"><li>• If a pair finishes early at Station A, ask them to name one thing on the table the magnet will not pull, still only two magnets in hands.</li></ul> | <ul style="list-style-type: none"><li>• Invite them to say how the job helps (so the picture stays; so the metal is picked up) and spot a magnet job at home tonight to tell an adult.</li></ul> |

**Cross-curricular hook**

Oral language: sentence starter My magnet was... and its job was... builds describing and explaining in Aistear-style talk.