

Magnet sorting: yes or no

Lesson at a glance

Open with two empty sorting hoops and one chunky magnet, then a quick point-guess on three or four tray objects. Children take short adult-supervised turns at one or two magnet stations, feeling pull or no pull while the class choruses yes or no. Real objects go into the shared pulls / does not pull hoops, then four new picture cards are sorted on the IWB. Close on the Investigation Journal: each child draws one thing that pulled and one that did not.

Learning objectives

- Test objects with a magnet and sort them into pulls or does not pull
- Say that magnets pull some materials and not others

Before the bell – prep

Set one or two teacher-supervised stations only: one chunky magnet each, one mixed tray (taped empty food tin, metal spoon, wooden peg, crayon, large plastic brick, plus chunky extras to eight-ten). Tape tin rims. Clear tablets and phones away. Print one Investigation Journal page per child. Picture-sort interactive ready on the IWB.

**Materials**

Item	Qty	Per	Source	Low-cost substitute
strong chunky magnets	2	class	school kit	large fridge magnets (still chunky; never small loose magnets)
mixed test objects (empty food tin (rim taped over), metal spoon, wooden peg, crayon, large plastic building brick), eight to ten chunky objects in all	1	station	classroom	any chunky safe metal and non-metal classroom things: a steel biscuit tin lid with the edge taped, a big wooden block, a plastic beaker, a fabric scrap
sorting hoops	2	class	classroom	two trays, two hoops drawn with masking tape on the table, or two labelled baskets
small trays for objects	1	station	classroom	a shallow box lid or plate
fridge magnet or classroom magnetic catch (for the close)	1	class	classroom	point to a magnetic whiteboard edge or door catch already in the room

Safety watch-point

Chunky magnets only at adult-supervised stations; no small neodymium. Magnets stay away from mouths, tablets and phones. Stop any mouth play at once; count every magnet back in.

Teaching moves

- **Getting Started:** Hold up the chunky magnet and two empty hoops. Keep the tray covered. Ask who has seen a fridge magnet holding a picture, then move straight on — do not unpack the tray yet.
- **Look at the tray:** Show the tray briefly. Name only three or four objects; children point to pulls or does not pull. Model one short I wonder / I think on the tin, then go to testing — no board explanation of what magnets are made of.
- **Test with the magnet:** Model a full cycle with the taped tin first. Call pairs or small groups to the station while you stay beside the magnet; the rest watch and chorus yes or no. Rotate hands-on turns briskly. After the first clear pull, say aloud: the magnet pulls some things and not others.
- **Two hoops:** Use one shared pair of class hoops. After each test, a helper places the real object. Ask why it goes there; if the class disagrees, re-test at the station so everyone sees the evidence again.
- **Sort the pictures:** Open the picture-sort interactive in explore mode. Read Does the magnet pull it? for nail, wooden block, scissors and rubber. Drag each card as children call the hoop; treat a wrong hoop as a friendly how could we check chat.
- **Show and draw:** Hand out the Investigation Journal page now. Children draw one pull and one no-pull. Circulate: Show me the one the magnet pulled — how do you know? Scribe a label if needed; point back at the class hoops if drawings are swapped.
- **What did we notice?:** Stand by the real hoops. Point and say the magnet pulled the tin; it did not pull the peg or crayon. Hold up a fridge magnet or door catch, then check one new classroom object at the station with hands-up pull or not.

What it should show

Tin pulls every time; peg, crayon and plastic brick do not. Spoons and keys may not pull if brass, aluminium or mixed alloy — accept the evidence and sort by what happened. On the picture-sort, nail and scissors go in pulls; wooden block and rubber do not. Most Junior Infants will draw one stick and one no-stick object; affirm, then steer any mixed pair back to the class hoops.

Misconceptions & interventions

- **It looks shiny / metal-looking, so the magnet will pull it — gold-coloured plastic or some cutlery fools them.** — Keep the talk on what we feel and see when we try. Re-test the tricky object at the station and sort by the pull or no pull the class just felt.
- **The magnet pulls everything, or only the things I guessed first.** — Point at both hoops with real objects in them and restate: the magnet pulls some things and not others. Place only after a test, never from the first guess alone.

**Differentiation**

Emerging	Developing	Proficient
• Test with your hand over theirs at the station; scribe the Journal label while they point to the matching hoop.	• After their turn, ask them to name a second tray object that felt the same as the first pull or no-pull.	• Invite them to say what felt the same about the pull group, or to predict pull or not for one new classroom object before you check it at the station.

Cross-curricular hook

Links to Aistear sorting play and oral language — children justify pull or no pull using the shared hoops as evidence.