

Pushes and pulls

Lesson at a glance

Open with a soft ball on the floor and ask how hands alone could send it away or bring something closer. Name push and pull using the classroom door both ways, then model a ball roll, play-dough press and wagon tug before the short force wrap-up line. Mixed groups rotate a Door–Wagon–Play-dough–Ball circuit naming each action aloud. Pupils record two stations on the Investigation Journal page, then spot everyday pushes and pulls around the room in a share.

Learning objectives

- Name an action as a push or a pull
- Say what happened when a push or pull was used on an object

Before the bell – prep

Day before: one soft ball, a pull-along wagon, a play-dough ball on a tray, and sticky labels (Door, Wagon, Play-dough, Ball). Prefer a cupboard door as the Door station so you stay free to circulate. Mark a clear floor lane for the single ball; keep spares boxed.

Materials

Item	Qty	Per	Source	Low-cost substitute
soft ball	2	class	school kit	a rolled pair of socks or a tennis ball
play-dough (fist-sized ball on a tray)	4	class	classroom	soft modelling clay or a piece of blu-tack
pull-along toy or small wagon	1	class	school kit	a cardboard box with a string handle
station sticky-note labels (Door, Wagon, Play-dough, Ball)	1	class	classroom	scrap paper labels and sticky tape
tray for play-dough station	1	class	classroom	a plastic lid or a sheet of newspaper
Investigation Journal page	1	pupil	classroom	a blank A4 page with two boxes for the two stations
pencil	1	pupil	classroom	crayon or colouring pencil



Safety watch-point

Gentle actions only. One soft ball rolled along the floor — no throwing. Keep the wagon path clear and hands/feet away from friends at every station.



Teaching moves

- **Getting Started:** Place one soft ball on the floor. Ask how we could move it without feet — send it away or bring something toward us. Take two or three ideas; if someone says kick, steer to hands. Do not name push or pull yet; keep the wagon and play-dough with you.
- **Push or pull?:** Open the classroom door toward you (pull) then away (push) and have the class call which is which. Think-aloud the ball push, the play-dough flatten push, and the wagon pull. Only then add the one-line wrap-up: a push or a pull is a force. If time is tight, drop the second push model rather than rushing the circuit.
- **Push-and-pull play circuit:** Split into four mixed groups (three if no cupboard door — use the classroom door as one shared stop). About 3–4 minutes per station; clap or chime to rotate. Stay mobile asking ‘Push or pull? What happened?’ One object per station: short turns while watchers name the action. If a station stalls, model once and hand it back.
- **Record what happened:** On the Investigation Journal page, each child chooses two stations. Prompt only with ‘Push or pull?’ and ‘What happened?’ Accept a drawing plus the single word push or pull; offer the sentence stems only if a child stalls on writing. If push and pull are swapped, redo that action once at the object with them.
- **Spot pushes and pulls around us:** One push and one pull spotted in the room, then four or five class shares on the board. If ideas dry up, walk to a blind, chair or bag and ask what hands would do. Close by wondering about the yard and playground — keep it oral, no second recording task.

What it should show

Expect: ball roll and play-dough flatten named as push (moves away / goes flat); wagon as pull (comes closer); door either way depending how it was opened. A child who calls the wagon a push often pushed the body rather than tugged the handle — redo the handle tug with them. Gentle play-dough presses still count as pushes.

Misconceptions & interventions

- **Only a big hard shove counts as a push — a gentle press doesn’t.** — Press the play-dough lightly yourself: ‘Still a push — it changed shape.’ Size of the force is for next time; today we only name the kind.
- **Children mix the direction words: calling the wagon a push or the rolling ball a pull.** — Redo the action once with them and re-voice the stem: push = away or shape change; pull = toward you. Match the word to what the object did.



Differentiation

Emerging	Developing	Proficient
• Stay beside the teacher at one station and answer only ‘push or pull?’ while the adult models the action; record with a drawing plus the single word push or pull. • Offer the oral sentence stems (‘I used a push and...’) to copy or finish aloud before any drawing.	• Prompt a second noticing at the same station: ‘What happened to the object?’ so the journal shows both the name and the effect. • If a group finishes a station early, ask them to spot one more push or pull they can see from where they stand.	• Ask them to explain why the door can be either a push or a pull depending on how it is opened. • In the classroom share, challenge them to name one push and one pull they might spot in the yard or playground and what would happen.

Cross-curricular hook

Link to oral language: pairs use the stems ‘I used a push/pull and...’ so every child practises a full noticing sentence.