

How do we make it go?

Lesson at a glance

Hold up a wind-up toy, let it run down, and ask how we make it go again. Show four items (wind-up toy, sealed battery torch, plain push car, pinwheel) for quick thumbs guesses, then run a short whole-class torch switch moment before free-flow at winding, push and blow stations. Gather to sort the four real objects into labelled hoops (key, battery, hand push, puff of air), lock the torch under battery, and draw one or two tried items on the SortingGrid Investigation Journal page. Close with oral make-sense talk naming what each needed.

Learning objectives

- Try different ways of making a toy or object go
- Sort objects by what makes them go: winding, battery, push or wind
- Say what makes at least one object go

Before the bell – prep

Day before: gather chunky wind-ups, plain push cars (no pull-back), pinwheels, and two sealed screwed-shut battery torches — no button/coin cells; keep spare batteries with you. Print SortingGrid pages and four hoop/tray labels matching the journal picture cues (key, battery, hand, puff of air). Set three free-flow trays; keep torches off trays.

Materials

Item	Qty	Per	Source	Low-cost substitute
chunky wind-up toys	4	class	school kit	one wind-up toy shared at a teacher-led station while other groups use a kitchen timer you wind
battery torch with sealed screwed-shut battery compartment	2	class	school kit	one teacher-held sealed torch the class takes turns switching on the carpet
plain push toy cars (no pull-back mechanism)	4	class	classroom	small balls children push along a taped lane
pinwheels	6	class	supermarket	paper fans children wave, or strips of tissue blown gently
sorting hoops or trays with picture-and-word labels (winding/key, battery, push, wind/blow)	4	class	classroom	four sheets of paper on the floor as group mats with the same sketched picture cues
masking tape for a short car lane	1	class	classroom	use the edge of a rug as the lane
plain paper for drawing	1	pupil	classroom	the back of scrap paper or a whiteboard and wipe after sharing at the hoop

Safety watch-point

Sealed screwed-shut torches only; no button/coin cells; spare batteries stay with you. Stay mobile at free-flow — small parts, rolling cars, no running with pinwheel sticks near faces.

Teaching moves

- **Getting Started:** Wind one toy so it walks, let it stop, and take two or three ideas for how to make it go again. Do not name the four go-types yet and keep the other station toys hidden.
- **Look and wonder:** Show wind-up, sealed torch, plain push car and pinwheel one by one without letting children try them. Take thumbs guesses only; lightly echo ideas but keep the board to the big idea what makes it go.
- **Try making them go:** Whole class first: hold a sealed torch and say the switch lets it go and a battery inside gives it the go; pass two sealed torches so every pair gets a short on/off turn with covers shut. Model wind, push and gentle blow, then free-flow groups of four to six across the three trays while you stay mobile asking what they did to make it go.
- **Sort what makes them go:** Lay four picture-labelled hoops and lock in the names once: winding means turning a key; wind here means a puff of air we blow. Class-call each object into its hoop. With the torch in hand, press the switch and revoice battery — not a switch group — before chorally placing it under battery.
- **Draw your sort:** Hand one SortingGrid page each. Children draw one or two things they tried beside the matching hoop picture; full four-group completeness is not required. Circulate with This one goes by... and scribe a word only if asked.
- **Make-sense talk:** Whole-class oral only. Revoice: we wind with a key; battery inside; we push; a puff of air spins. If someone says only a switch or only electricity makes things go, point back to the pinwheel and push car.

What it should show

Most children will name the action they used: turn the key, press the switch/battery, push, or blow. Expect the wind-up under winding, car under push, pinwheel under blow/wind, and torch under battery after the switch-and-battery line. A child who puts the torch under switch or light needs one revoice with the torch in view: the go comes from the battery inside.

Misconceptions & interventions

- **The torch goes by the switch (or by light), so it belongs in a switch group.** — Hold the torch, press the switch once, and say slowly: the switch lets it go; a battery inside gives it the go. Chorally place it in the battery hoop — do not open the compartment.
- **Batteries are magic, or big things always need more go than small ones.** — Keep it simple: each thing needs the right kind of go. If size comes up, counter with a tiny pinwheel and a big push car — both go, each with its own kind.
- **Only electricity or a switch makes things go.** — Point back to the pinwheel and plain push car and revoice the four kinds: winding with a key, battery, push, or a puff of air.

**Differentiation**

Emerging	Developing	Proficient
• Stay with you at one free-flow tray and name the action (wind, push, blow); draw just one remembered item beside its picture cue. • Accept pointing to the hoop picture or an emergent mark; scribe the go-word only if the child asks.	• Visit all three free-flow trays and whisper to a partner what each one needed before the carpet sort.	• After drawing, name one more classroom thing orally and point to which group it would join (e.g. a door you push).

Cross-curricular hook

Oral language: sentence stem This one goes by... and partner exit ticket naming one go-type.