

How do we make it go?

Lesson at a glance

Hold up a wind-up toy, let it run down, and ask how to make it go again. Show the four objects (wind-up, sealed torch, push car, pinwheel) for thumbs-up guesses, then try the torch together before free-flow stations for winding, push and blow. Gather to sort the real objects into four labelled hoops — winding, battery, push, wind — locking the torch under battery. Children draw one thing they made go and mark how (key, arrow, puff, battery), then share in a display-only make-sense talk.

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: set three trays (chunky wind-up toys, plain push cars only — no pull-back, pinwheels) plus two sealed torches kept with you. Tug-test every wind-up key, wheel and button; set aside loose parts. Sketch four picture-word labels (key, battery, hand push, puff/cloud). No coin cells; spare batteries stay with you.

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

Torches stay sealed and screwed shut; no button/coin cells; spare batteries with you only. Tug-test wind-ups for loose parts. No running with pinwheel sticks near faces.

Teaching moves

- **Getting Started:** Wind one toy so it walks, let it stop, and ask How do we make it go again? Take two or three ideas only. Keep the other station toys and the four go-type names hidden.
- **Look and wonder:** Show each object in turn for thumbs guesses — What do you think makes this go? Echo pupil words lightly but leave go-type labels off the board so children think about the object in your hand, not a word list.
- **Try making them go:** Part A: hold a sealed torch and say once The switch lets it go. A battery inside gives it the go. We do not open it. Pass two torches so every child presses on/off. Part B: quick-model wind, push and gentle blow, then free-flow groups of four to six. Stand nearest the winding tray. Circulate with What did you do to make it go?
- **Sort what makes them go:** Lay four hoops with picture-word labels. Say the pair once: winding with a key versus the wind, a puff of air we blow. Hold each object for a class call, then place it. Before the torch goes in, point to the switch and tap the closed battery end: You pressed the switch... a battery inside gives it the go — chorus battery as you place it.
- **Draw how you made it go:** Six minutes, one or two drawings of things they made go, with a how mark (arrow, key, puff, battery rectangle). Model one how on the board, leave the hoops visible as a prop, then ask about half the class out loud: what did you make go, and what did you do?
- **Make-sense talk:** Whole-class oral only. Revoice: We wind this one with a key. This one needs a battery. We push this one. The wind spins this one. If switch-only or electricity-only appears, point back to the pinwheel and push car.

What it should show

Children typically place wind-up under winding (key), torch under battery, car under push, pinwheel under wind/blow, and can say what they did for at least one. A child who puts the torch under switch or light needs the battery lock-in revoiced with the sealed torch in view. Size-is-the-rule talk is redirected: each needs the right kind of go.

Misconceptions & interventions

- **The torch goes because of the switch (or light) — they miss the battery inside.** — Hold the sealed torch, point to the switch then tap the closed battery end: the switch lets it go; the battery gives it the go. Chorus battery as it goes in that hoop.
- **Only a switch or electricity makes things go — push cars and pinwheels do not count.** — Point back to the pinwheel and plain push car on the carpet: at this age, things can go by winding, battery, push or wind.
- **Big things always need more go, or batteries are magic.** — Keep it plain: size is not the rule — a tiny pinwheel and a big push car can both go; each needs the right kind of go, not magic.

**Differentiation**

Emerging	Developing	Proficient
• Stay at one station with you and name the single action (wind, push or blow); guarantee a torch on/off turn with you before the sort. • Lean on the picture-word hoop labels and draw one object with one how mark copied from your board model.	• Visit all three stations and whisper to a partner what each one needed before the carpet sort.	• Draw two different go-types and tell a partner the action for each; help revoice a classmate who says switch toward battery during the sort.

Cross-curricular hook

Oral language: partner sentences naming the object and the action (I wound the toy / I blew the pinwheel).