

Toys that need winding, batteries or a push

Lesson at a glance

Open by winding a toy under the table and setting it moving on its own so the class gasps and guesses. Uncover four toys on a tray — wind-up, sealed battery torch, push car and spinning top — then model the wonder-try-notice pattern on the wind-up. Shared try-and-watch play lets one child try while others label wind, switch or push. Close on the carpet with hand-gesture shares and a make-sense talk that each toy gets energy in a different way.

Learning objectives

- Try different toys and say whether each needs a wind, a switch, or a push
- Talk about how different toys get going (and that this is energy)

Before the bell – prep

Gather one wind-up toy, one sealed screwed-shut battery torch (no button or coin cells), one push car and one spinning top on a low tray. Check every battery cover is secure and remove any toy that can open. Mark clear floor spots for safe push and spin turns.

Materials

Item	Qty	Per	Source	Low-cost substitute
wind-up toy (chunky, easy key or knob)	2	class	school kit	a wind-up kitchen timer used as a 'toy that goes when wound'
battery torch with sealed, screwed-shut battery compartment	2	class	school kit	a classroom torch or large flashlight with a screwed cover (never a loose button-cell light)
simple toy car that rolls when pushed (not pull-back)	2	class	school kit	a small soft ball to roll with a gentle push
spinning top (chunky, not mouth-sized parts)	2	class	school kit	a large plastic lid or chunky PE marker disc spun on the floor under adult watch — nothing small enough to fit in a mouth; if none available, skip the top and use only the push car for push toys
sharing tray for the four toys	1	class	classroom	a shallow cardboard box lid

**Safety watch-point**

Only sealed, screwed-shut battery toys — no button or coin cells. If a cover can open, remove it at once. One child tries; push and spin away from faces and toes; nothing near mouths.

**Teaching moves**

- **Getting Started:** Wind the toy out of sight, set it down moving, and ask how it went without a push just then. Smile and accept every guess — do not name wind, switch or push yet.
- **What makes a toy go?:** Uncover the four toys and hold each up briefly. Model the full cycle on the wind-up only: wonder, guess, wind the key, notice it walks, say it needs a wind. Keep energy as teacher language for now.
- **Toy station play:** Run short shared turns: one child tries gently while watchers answer wind, switch or push first. Limit winding to a few turns; torch is switch only with the cover shut and in your view; car and top get a gentle push or spin away from faces and toes. Clap or song to regroup every few minutes.
- **What did we notice?:** Hold up each toy and invite two or three children to mime wind, switch or push and say what happened. Revoice after each: winding gave energy; the battery stores energy and we only touch the switch; our push or spin gave energy to move.
- **Make-sense talk:** Line the four toys up and touch each as the class points and says wind, switch or push. Offer a choice of two toys: which would you play with, and show how it goes. Light science link only — that is how each toy gets energy. No writing.

**What it should show**

Most infants link each toy by word or gesture: wind-up needs a wind, torch a switch, car and top a push or spin. They notice walking, lighting, rolling or spinning. Affirm gesture answers. Gently redirect “magic” or “all need batteries” by pointing back to what hands actually did on each toy.

**Misconceptions & interventions**

- **The torch lights by magic, or every toy needs batteries to go.** — Hold up each toy and replay the hand action: we wound this one, we switched this one, we pushed these. Say the torch’s energy is stored in a sealed battery inside — children only touch the switch.
- **If nobody is holding it, the toy moves by itself with nothing starting it.** — Replay the wind-up cycle: show the key turns, set it down, and revoice that winding gave it energy to go on its own.





Differentiation

Emerging	Developing	Proficient
Let the child point or mime wind, switch or push while you name the word; pair them as a watcher who answers first after each try.	After a try, ask what happened (it walked, lit, rolled, spun) as well as wind, switch or push.	Ask which toy was most surprising and why, still using only wind, switch or push and the four toys on the tray.

Cross-curricular hook

Strong oral-language beat: infants rehearse three action words with gesture and turn-taking talk in the circle share.