

Wide feet stand up

Lesson at a glance

Open by rocking one cup on your palm and inviting quick guesses about what helps something stay up. Name wide feet and thin feet with a body demo, then pairs build two freestanding cup or block towers the same height—one with three pieces spread at the base, one with a single piece. Each pair gives their tray one gentle nudge, notices which tower stays up, and closes by spotting wide feet on a real classroom stand.

Learning objectives

- Build two towers the same height with wide feet and thin feet
- Notice which tower stays up better when the tray is nudged
- Say that wide feet help a tower stand

Before the bell – prep

Gather about 12 plastic cups or blocks and one flat tray per pair the day before. Leave your worked model (wide triangle base beside a single-cup base, matched height) standing at the front bench before the bell so pairs can copy the pattern.

Materials

Item	Qty	Per	Source	Low-cost substitute
plastic cups or wooden blocks (about 12 per pair: enough for a 3-piece wide base plus two short matching towers)	12	group	classroom	clean stackable yoghurt pots or paper cups from the supermarket
flat tray or shallow box (build surface for the gentle nudge test)	1	group	classroom	a sturdy cardboard lid or a large hardback book used as a base

Safety watch-point

Build below shoulder height. Nudge the tray, not the tower. Stand back as towers fall; clear feet from under the tray edge; mind fingers between cups.

**Teaching moves**

- **Getting Started:** Hold one cup or block on your palm and rock it gently. Keep the tray and build kit out of sight. Take two or three quick guesses only—wide bottom, sticky tape, being short—and accept every idea kindly.
- **Wide feet and thin feet:** Plant both feet wide and rock steady, then stand on tiptoe on one foot and wobble. Say: wide feet mean a big spread-out bottom; thin feet mean a small bottom. Show the empty tray once so children picture where the towers will stand.
- **Build two towers:** Model one full cycle at the front: three cups in a triangle for wide feet, one cup for thin feet, same number of layers, hand or book level across the tops. Leave your model up. Circulate asking ‘Show me the wide feet. Show me the thin feet. Same height?’ No glue or tape.
- **Gentle nudge:** Demo one soft one-finger nudge on your model tray—say nothing about which tower fell. Pairs take one gentle nudge each. After they try, whole-class share: which stayed up, and why? Revoice into ‘wide feet help a tower stand steady.’
- **Wide feet all around us:** Point to a freestanding classroom easel or coat stand and name its wide feet. Model the stem ‘Wide feet help because...’ then pairs finish it orally. Keep it short and stay oral—no drawing sheet.

What it should show

Almost every thin-feet tower falls first; the wide-feet tower stays standing after a gentle nudge. If both fall, the nudge was too hard—model a softer finger push. If neither falls, the thin base is not thin enough; help the pair use a single cup or block at the bottom.

Misconceptions & interventions

- **‘Taller things always fall first’—children blame height instead of the feet.** — Point to both towers side by side and check the tops with a hand or book. Remind them both are the same height so the only difference is wide feet or thin feet.
- **Children push the tower itself or slam the tray, so both towers crash and the compare is lost.** — Stop and re-demo one soft one-finger nudge on the tray only. Say: nudge the tray, not the tower—stand back and watch.

Differentiation

Emerging	Developing	Proficient
• Fewer pieces, stop at three high; pair works beside the front model and points to wide feet versus thin feet before each stack.	• Match heights carefully with a hand or book across the tops, then say one noticed thing to their partner after the nudge.	• After the compare, add one layer only to the wide-feet tower and try one more gentle nudge with that pair—still freestanding, no glue.

Cross-curricular hook

Link to PE balance work—plant feet wide to stand steady, then try on tiptoe to feel the wobble.

