

materials

Bendy and stiff

Lesson at a glance

Open by gently bending a drinking straw so it curves, then pressing a wooden ruler so it stays straight, and ask what was different. Name bendy and stiff, show the tray, and invite guesses. In small groups children gently press straws, pipe-cleaners, lolly sticks, a teaspoon and a ruler, then sort into two hoops. On the Investigation Journal page they mark one bendy and one stiff thing. Close with a short talk on choosing a stiff spoon for soup.

Learning objectives

- Gently try to bend everyday items and sort them into bendy or stiff
- Say which materials bent and which stayed stiff

Before the bell – prep

Set one tray per group of 4–6: several straws, pipe-cleaners and lolly sticks, plus one metal teaspoon and one wooden ruler. Place two hoops (or trays) per group for sorting. Have Investigation Journal pages ready. Count pipe-cleaners back in after.

Materials

Item	Qty	Per	Source	Low-cost substitute
drinking straws	4	group	supermarket	paper strips rolled into loose tubes and taped
pipe-cleaners	4	group	classroom	soft craft wire or plastic-coated twist-ties
lolly sticks	4	group	classroom	thin craft sticks or clean ice-lolly sticks from home
metal teaspoon	1	group	classroom	a blunt metal dessert spoon from the staff room
wooden ruler (30 cm)	1	group	classroom	a straight wooden paint-stirrer or a firm cardboard strip
sorting hoops or two shallow trays	2	group	classroom	two sheets of paper labelled by the teacher saying bendy and stiff, or two empty lunch boxes
Investigation Journal page	1	pupil	provided printable	a blank page folded in half for bendy and stiff drawings



Safety watch-point

Gentle two-handed presses only, away from faces and eyes. Supervise pipe-cleaner ends (pokey). Nothing near mouths.



Teaching moves

- **Getting Started:** Hold up only the straw and the ruler. Bend the straw so the class sees it curve, then give the ruler the same gentle push so it stays straight. Ask what was different. Keep the full tray out of sight and do not name bendy or stiff yet.
- **Look and wonder:** Say the two words with the objects still in view: bendy curves when we push gently; stiff stays straight. Show the tray and invite pointing only — no grabbing. Model one full cycle aloud on the straw, then on the ruler, before children try.
- **Gently try to bend:** Send groups to trays. Bendy items stay out for simultaneous tries; pass the teaspoon and ruler one child at a time. Circulate saying soft hands, away from faces. Run two short bursts with a quick regroup rather than one long sit.
- **Sort bendy and stiff:** Every group sorts at their own two hoops. Children place one item at a time and tell a friend why. Sample reasons as you circulate; if a group disagrees about a lolly stick, ask what their hands felt rather than forcing one answer.
- **Show and draw:** Keep tray items visible. Model a scribble or simple mark on the bendy side, then the stiff side — a blob counts fully. Sit with a small group and prompt: show me one that bent; mark it; show me one that stayed straight.
- **Make-sense talk:** In a circle, hold up one bendy and one stiff example and revoice child words. Add one short sentence only: people choose bendy when something needs to curve, stiff when it must stay straight — like a spoon for soup. Keep it oral; no writing.

What it should show

Most Junior Infants will notice straws and pipe-cleaners curve easily, and the teaspoon and wooden ruler stay straight. Lolly sticks may bend a little or stay mostly stiff — affirm what hands felt rather than forcing one label. A child who sorts by look alone without pressing may change their mind after a gentle re-try.

Misconceptions & interventions

- **Children think stiff means heavy, so a light ruler cannot be stiff.** — Bring them back to the test: press gently with two hands. Did it curve or stay straight? The ruler is light but it stayed straight, so we call it stiff.
- **Children think anything metal is stiff, or that the teaspoon will bend because it is thin.** — Have them press the teaspoon gently and watch. It stayed straight — metal or not, we sort by what happened when we pushed.



Differentiation

Emerging	Developing	Proficient
• Offer hand-over-hand support for a gentle two-handed press and let the child point into the hoop while you place the item. • Accept a scribble or single mark on each side of the Investigation Journal page as full success.	• After sorting, ask them to try a second straw or pipe-cleaner and say whether it felt the same. • Prompt the short reason to a friend: it is bendy because it curved.	• Mark a second bendy or stiff item from the tray, or whisper one more thing in the room they think is stiff (a table leg, a book). • If the group disagrees about a lolly stick, lead a short table talk on what each child’s hands felt.

Cross-curricular hook

Oral language: children practise the short reason sentence — bendy because it curved; stiff because it stayed straight.