

materials

Bendy and stiff

Lesson at a glance

Hold up a drinking straw and a wooden ruler and gently try to bend each so Junior Infants see one curve and one stay straight. Name bendy and stiff, show the full tray, then groups gently press straws, pipe-cleaners, lolly sticks, a teaspoon and a ruler. Sort items into two hoops and mark one bendy and one stiff thing on the Investigation Journal page. Close with a short talk on why a spoon for soup needs to stay stiff.

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

Night before, set one tray per group of 4–6: several straws, pipe-cleaners and lolly sticks, plus one metal teaspoon and one wooden ruler. Lay two hoops (or two empty trays) per group ready for sorting. Keep the class tray out of sight until Look and wonder.

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 bends only, away from faces and eyes. Watch pokey pipe-cleaner ends; nothing near mouths.

**Teaching moves**

- **Getting Started:** Hold only the straw and ruler so every child can see. Gently curve the straw, then give the ruler the same soft two-handed push so it stays straight. Ask what was different — hold back the words bendy and stiff until the next step.
- **Look and wonder:** Reveal the full tray and say the two key words once. Invite pointing guesses only. Model one full cycle aloud: wonder, gentle press, name bendy or stiff on the straw, then on the ruler.
- **Gently try to bend:** Run two short bursts. Let several children press straws, pipe-cleaners and lolly sticks at once; pass the teaspoon and ruler one child at a time. Circulate saying 'soft hands, away from faces' and fold waiters in with 'did it stay straight?'
- **Sort bendy and stiff:** Every group sorts at their own two hoops at once. Children place one item and tell a friend why. If a lolly stick sparks disagreement, celebrate both tests: 'What did your hands feel?' rather than forcing one hoop.
- **Show and draw:** Keep tray items visible. Model a scribble on the bendy side and one on the stiff side — a blob counts. Sit with a small group and prompt: show me one that bent, mark it; show me one that stayed straight, mark it.
- **Make-sense talk:** In a circle, hold up one bendy and one stiff example and revoice child words. Add one short line only: people choose bendy when something must curve, stiff when it must stay straight — then ask about a spoon for soup.

**What it should show**

Most children will find straws and pipe-cleaners curve easily and the teaspoon and wooden ruler stay straight. Lolly sticks often bend a little or feel mostly stiff — affirm what hands felt rather than one forced label. Affirm pointing or saying curved / stayed straight as full use of the words.

**Misconceptions & interventions**

- **'Stiff means heavy' or 'all metal things are stiff'.** — Keep the test on what hands feel: did it curve or stay straight? Press the light straw and the metal spoon side by side so weight is clearly not the rule.
- **Children sort from memory or looks without pressing again.** — Ask them to try once more at the hoop before they place it: 'Soft hands — curve or straight?' Let them move an item if they change their mind.





Differentiation

Emerging	Developing	Proficient
• Hand-over-hand support for a gentle two-handed press; accept pointing into the hoop or a single scribble-mark per side as full success.	• After one sort, try a second straw or pipe-cleaner and say whether it felt the same.	• Whisper one more bendy or stiff thing already in the room (table leg, book) and say why, still using only tray language.

Cross-curricular hook

Oral language: children practise the sentence stem ‘It is bendy because it curved’ with a talk partner.