

Describing properties

Lesson at a glance

Open by inviting two or three children to stroke a hidden mystery piece and call out a feeling word. Teach property, rough and smooth with picture cards, then groups take turns stroking identical tray materials and sort each piece into rough or smooth hoops, saying their reason. Consolidate with the picture-sort interactive on the IWB. Pupils draw one sorted material on the rough or smooth side of the Investigation Journal page and share one property word in a quick pair talk.

Learning objectives

- Handle materials safely and describe a property they notice
- Group materials by a chosen property such as rough or smooth
- Say one property word for a material they handled

Before the bell – prep

Before the lesson, set one identical materials tray and two hoops (or labelled trays) with rough/smooth picture-word cards at every group table. Print the Investigation Journal page per pupil. Have the picture-sort interactive ready on the IWB. Choose one mystery piece (sandpaper or soft fabric) to hide behind a book.

**Materials**

Item	Qty	Per	Source	Low-cost substitute
varied materials tray (sandpaper squares, cotton wool, kitchen foil, smooth plastic lids, smooth sanded wooden blocks, sponges, soft fabric scraps, bark or rough sticks, shiny spoon)	1	group	classroom	any clean classroom odds and ends with clear rough and smooth surfaces
property picture/word cards (rough with bumpy cue, smooth with slippery cue)	1	group	classroom	draw a bumpy line for rough and a flat line for smooth on sticky notes or mini whiteboards
sorting hoops or labelled trays	2	group	classroom	two cardboard box lids or two sheets of paper with bumpy and slippery picture cues
Investigation Journal page	1	pupil	classroom	a blank page folded into two columns labelled rough and smooth

Safety watch-point

Wash hands after handling sandpaper or bark. Supervise stroking with one finger only; wipe dusty tables during tidy.

Teaching moves

- **Getting Started:** Hide one mystery piece behind a book. Invite two or three children to stroke it with one finger and say a feeling word. Ask the seated class after each stroke: Do you agree? What feeling word would you say? Keep it choral and quick — do not name property or lay out the trays yet.
- **Property words we can use:** Show only the short board lines and large rough/smooth picture or word cards. Define property as how a material feels or looks; rough scrapes or grips, smooth slips. Ask which word fits the mystery piece. If a child offers hard, soft or shiny later, accept and revoice, but keep today's taught pair as rough and smooth.
- **Feel and look:** Model at the front: I stroke the sandpaper. It scrapes my finger. I think it is rough. Send every group to its own pre-set tray together — no class carousel. Children take short turns handling one piece while their talking partner watches, then swap. Fold the group in with: Is it rough or smooth?
- **Property table sort:** Agree the class rule: one piece at a time into the rough hoop or the smooth hoop, saying I put this here because it feels... Watch that children stroke before placing. Soft or fluffy pieces (cotton wool, sponge) may not scrape or slip clearly — let them name soft first, then choose the best-fit hoop. A sanded wooden block can go either way with a clear reason.
- **Board sort: rough or smooth:** Open the picture-sort interactive in explore mode. Read Is it rough or smooth? every time and drag after the class calls out. A card in the wrong hoop is a talk point: stroke it in your mind — does it scrape or slip? Keep cotton wool and sponge off this board sort.
- **Show and draw:** Hand out the Investigation Journal page in class. Children draw one thing they sorted on the rough or smooth side; a first-letter or single word is enough if ready. Circulate and ask each child to say one property word for something they handled; scribe only if the child wants help.
- **Make-sense talk:** One tight think-pair-share only: What property word did you use today, and which material was it for? Invite a hand mime — rough scrape or smooth stroke. Revoice answers into clear property language. Keep tidy and hand-wash for the next step.
- **What you covered:** One or two spoken recap lines while materials go away, plus a light clothes-maker link. Build in full minutes for tidy, stacking hoops, wiping dusty tables, and washing hands after sandpaper or bark — do not rush the wash.

What it should show

Most Senior Infants will name rough or smooth first and place sandpaper, bark and rough stick in the rough hoop; foil, plastic lid and shiny spoon in the smooth hoop. Cotton wool and sponge often get called soft or fluffy rather than clearly smooth — accept the true feel and talk it through. A sanded wooden block may land either side with a reason; treat disagreement as talk, not a wrong answer.



Misconceptions & interventions

- **Children say a material is 'nice' or 'big' instead of a property word.** — Gently steer: Is nice how it feels under your finger, or is it rough or smooth? Model stroking and naming the taught pair.
- **Children think shiny means the spoon or foil cannot also be smooth, or pick only one 'right' word.** — Celebrate two true properties: foil can be smooth and look shiny. Shiny is a look word; smooth is the feel word for today's sort.
- **Children place soft fluffy pieces (cotton wool, sponge) as smooth without stroking, or freeze because neither hoop feels perfect.** — Let them say soft or fluffy first, then choose the hoop that fits best. Keep those pieces for a short hard/soft oral talk if the group finishes early.



Differentiation

Emerging	Developing	Proficient
• Offer the rough/smooth picture-word cards at the tray so non-readers can point to the hoop cue before placing. • Accept drawing alone on the correct Investigation Journal side; scribe the child's spoken property word only if they want help.	• Prompt a clear reason sentence: I put this here because it feels... • If the group finishes early, run a second short oral sort of the same tray using hard or soft.	• Invite a second true word when noticed (for example smooth and shiny). • Ask who else picks materials with a reason — someone who makes a soft toy or a coat?



Cross-curricular hook

Links to oral language: children rehearse one clear property sentence with a talking partner.

