

materials

The right material for the job

Lesson at a glance

Open by holding up a real raincoat, umbrella or school bag and asking what job it does and why that material, not paper. Model job then property with a teddy-soft example and the stem I chose ... because it is Groups place labelled samples on four job cards, then gently check two jobs each (water drip, squeeze, hold-to-board, tug). They record job · material · why on the Investigation Journal page before a short property-reason share.

Learning objectives

- Choose a material for a simple job and give a property-based reason
- Notice why everyday objects are made of the material they are

Before the bell – prep

Print one job-card set per group (umbrella, teddy, window, school bag). Fill a tray per group with labelled handleable scraps: fabric, paper, foil, plastic, fleece, card, wood scrap, clear plastic, woven/denim. One drip tray and spoon per group; keep drops tiny.

**Materials**

Item	Qty	Per	Source	Low-cost substitute
job picture cards (umbrella, teddy, window, school bag)	1	group	classroom	simple drawings of the four jobs on sticky notes
materials tray samples (fabric scrap, soft fleece or clean stuffing, clear plastic sheet cut from a document wallet, card, foil, paper, small wood offcut, strong woven fabric or denim scrap)	1	group	classroom	offcuts and packaging from the recycling box at home or school
shallow tray for water drip checks	1	group	classroom	a clean plastic food container lid
spoon or dropper for water	1	group	classroom	a wet fingertip drip from a cup of water
paper towels	1	group	classroom	scrap cloth for wiping
real raincoat, umbrella or school bag to show at the start	1	class	classroom	a clear photo of a raincoat or umbrella on the IWB
Investigation Journal page	1	pupil	classroom	plain paper ruled into three ideas: job, material, why

Safety watch-point

One small spoon-drop only over the tray; wipe spills at once. Gentle two-handed tugs — no yanking. Wash hands after the water check.

Teaching moves

- **Getting Started:** Hold up one real object only (raincoat, umbrella or school bag). Ask: What job does this do, and what is special about the material? Invite one or two quick notices of materials already in the room, then stop — do not open the full trays yet.
- **Jobs and properties:** Project the short board text. Start with job, then the teddy feel question, then name soft as a property. Model one stem only: This job is to keep us dry / be soft to cuddle. I chose this material because it is waterproof / soft. Leave I chose ... because it is ... visible.
- **Match the job:** Groups place one sample on each job card by feel and look only. Circulate: What does this job need? How does your material feel or look? Value the property reason over a single correct sample. Leave matches on the cards for the next step.
- **Choose and try:** Assign two jobs per group so the class still covers all four. Coach gentle Stage 2 checks only: one spoon-drop over the tray, squeeze, hold up to the board, two-handed tug. Ask whether they will keep or change their first match. Wipe spills at once; no books taped to samples.
- **Record your choices:** Six minutes only. Pupils record the two jobs tried as job · material · why — a drawing plus one word-bank property is enough. Keep soft, strong, see-through, waterproof, hard, bendy, smooth, rough on the board. Do not demand full sentences.
- **Why that material?:** Display-only talk. Invite three or four groups and revoice into clear property language: So you chose foil because it is waterproof. Close by naming one classroom example together (glass window, fabric curtain, plastic lunch box) in one short job-and-property sentence.

What it should show

Expect waterproof samples (foil/plastic) for the umbrella, soft fleece for the teddy, clear plastic for the window, and strong woven fabric for the bag. More than one good match is fine if the property reason holds. Card for the bag is better than paper but still weak — name why real bags use tough fabric. Odd matches usually mean the group forgot the job; restate it and re-try.

Misconceptions & interventions

- **I picked this one because I like the colour / it's pretty.** — Gently revoice: What does the job need the material to do? Point back to the job card and have them try the feel or drip check again.
- **Paper would make a good window or school bag.** — Hold card and paper up to the board, then give a gentle tug over the tray. Ask: Can you see through it? Does it hold? Name see-through and strong as the missing properties.
- **Any soft thing will keep the rain off.** — Drip one drop on fleece and on foil or plastic. Watch which keeps the drop sitting on top and restate waterproof as the property the umbrella job needs.

**Differentiation**

Emerging	Developing	Proficient
• Offer the stem aloud and accept a drawing plus one dictated property word from the bank. • Stay at the teacher table for the first match and name the job need before they touch samples.	• After the try, ask: Will you keep your first match or change it, and what did your hands tell you?	• Suggest a second material for the same job and say why it would be worse. • Fast finishers draw one classroom object and label its material and job on the journal page or scrap paper.

Cross-curricular hook

Oral language: rehearse the stem I chose ... because it is ...; link umbrella waterproofing to wet Irish weather.