

materials

The right material for the job

Lesson at a glance

Hold up one real raincoat, umbrella or school bag and ask what job it does and why that material suits. Teach job and property with a short oral model, then groups match tray samples to four job cards (umbrella, teddy, window, bag). They gently test two jobs—drip, squeeze, hold-to-board, tug—keep or change the match, and record job · material · why on the Investigation Journal page before a class share of property reasons.

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 the night before. Stock each tray with labelled scraps: paper, card, foil, clear plastic, fleece, thin fabric, woven/denim scrap, a wood offcut. One drip tray, spoon and water per group. Have a real raincoat, umbrella or bag ready for the hook.



**Materials**

Item	Qty	Per	Source	Low-cost substitute
job picture cards (umbrella, teddy, window, school bag)	1	group	provided printable	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	provided printable	plain paper ruled into three ideas: job, material, why

Safety watch-point

Keep water drips to one drop over a tray; wipe spills at once. Gentle two-handed tugs only—no hard pulls, no taping books, no folding samples around books.

Teaching moves

- **Getting Started:** Hold up one real object only—raincoat, umbrella or school bag—and ask: What job does this do, and what is special about the material? Take two quick notices of materials already in the room, then move on so the hook stays short.
- **Jobs and properties:** Project the short board text. Start with job, ask what a teddy material must feel like, then bridge to property with soft as the example. Model one stem only: I chose ... because it is ... Leave that stem visible. Head off colour-only choices with What does the job need the material to do?
- **Match the job:** Groups place one tray sample on each job card by feel and look only—matches stay on the cards for the next step. Circulate asking What does this job need? How does your material feel or look? Value the property reason; more than one good match is fine.
- **Choose and try:** Assign two jobs per group to fit 40 minutes. Run gentle Stage 2 checks only: one water drop for keep-dry, cheek-squeeze for soft, hold-to-board for see-through, two-handed tug over the tray for strong. Ask Will you keep your first match or change it? Wipe spills at once.
- **Record your choices:** Journal only here. 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 talk columns or demand full sentences.
- **Why that material?:** Invite three or four groups. Revoice into clear property language: So you chose foil because it is waterproof. Close STEM eyes on one classroom example—glass window, fabric curtain or plastic lunch box—and name job and property in one sentence.

What it should show

Expect waterproof foil or plastic for the umbrella; soft fleece for the teddy; clear plastic for the window; strong woven fabric or denim for the bag. Card for a bag is better than paper but still weak—name why real bags use tough fabric. An odd match usually means the group forgot the job; ask them to restate it and try again.

Misconceptions & interventions

- **I picked this one because I like the colour / it's pretty.** — Point back to the job card: What does this job need the material to do? Have them restate soft, waterproof, see-through or strong before they keep or change the sample.
- **Paper would make a good window / bag if we just use more of it.** — Hold paper up to the board and give it a gentle tug over the tray. Ask what their hands and eyes told them, then revoice: a window needs see-through; a bag needs strong without tearing.

**Differentiation**

Emerging	Developing	Proficient
• Offer the stem aloud—I chose ... because it is ...—and accept a drawing plus one dictated property word from the bank. • Pair at the teacher table for one job only and place the sample together after naming the job.	• After the first match, ask them to try the gentle test and say keep or change with one property word. • Prompt Why not paper? on the window or bag job.	• Suggest a second material for the same job and say why it would be worse. • On spare journal space, draw one classroom object and label its material, job and property.

Cross-curricular hook

Link to oral language: rehearse the stem I chose ... because it is ... so every pupil can give a property reason aloud.