

materials

Natural or man-made?

Lesson at a glance

Open by holding up a wooden spoon and a plastic spoon and asking where each came from, without naming the terms yet. Model the natural/man-made test with a feather and foil, then groups handle a mixed tray and sort samples onto two labelled sheets with a gap for unsure items. Drive the sorting-tree interactive on four hard cases (paper, glass, woolly hat, rubber band) where “both” is allowed. Pupils draw one natural and one man-made item in the Investigation Journal and share reasons in a display-only close.

Learning objectives

- Sort materials into natural and man-made groups with a simple reason
- Say whether familiar everyday objects are natural or man-made

Before the bell – prep

Day before, bag one mixed tray per group: wood block/peg, wool scrap, stone, cotton, feather, plastic lid, foil square, polyester/fleece scrap, paperclip — do not pre-sort. Cut two large labelled sheets (natural / man-made) per group. Keep a wooden spoon and plastic spoon ready for the hook.

Materials

Item	Qty	Per	Source	Low-cost substitute
wooden spoon (or wood sample)	1	class	classroom	a wooden peg or lolly stick
plastic spoon (or plastic sample)	1	class	classroom	a clean plastic bottle lid
mixed sorting tray of samples (wood, wool, stone, cotton, feather, plastic lid, foil, polyester or fleece scrap, paperclip)	1	group	classroom	photo cards plus two or three real items from outdoors, clean recycling or home
two large sheets of paper labelled natural and man-made	2	group	classroom	masking-tape circles on the table, or one shared pair of PE hoops at the front if space allows
Investigation Journal page	1	pupil	provided printable	a plain page folded in half labelled natural and man-made



Safety watch-point

Treat feathers and delicate natural samples gently. After wool, feathers or dusty stones, wipe tables and have pupils handwash during pack-away.



Teaching moves

- **Getting Started:** Hold up the wooden and plastic spoons (or clear photos). Ask only where each came from and take two or three ideas. Steer briefly to what each is made of — wood from a tree, plastic made by people — not who shaped the spoon, then move on.
- **Natural or man-made?:** Project only the short board text. Say the worked model aloud: wonder, predict, look/feel, decide — first with a feather (natural from an animal), then foil (man-made by people). Head off soft=natural and hard=man-made before groups touch anything.
- **Handle and notice:** Give each group one mixed tray so every child handles two or three items. Circulate and revoice touch clues: rough bark-like wood, shiny foil, soft wool. Ask: Does this grow? Did people make it? Have you seen this at home?
- **Sort: natural or man-made:** Two labelled sheets per group with a clear gap for unsure. Cue metal early: people dig metal up then make foil and paperclips, so those go man-made today. Park paper in the gap or accept “from trees → natural” without a factory story. One child per group holds up one item and a reason.
- **Four that are hard:** Open the sorting-tree interactive in explore mode and drive it yourself — do not re-sort the trays. Work paper, glass, woolly hat and rubber band. Accept “both” when pupils can say which part is which; if someone says glass is natural from sand, ask whether a window lies on a beach.
- **Record in your journal:** One natural and one man-made from their own tray, drawn with a word or short label. Offer the stems orally: This is natural because... / This is man-made because... Let them find the page space themselves so recording time is not lost to layout talk.
- **Make sense together:** Revoice: natural from plants, animals or the ground; man-made made by people. Briefly revisit metal if needed. Optional noticing: spot one natural and one man-made thing at home — paper or talk only, not a digital task.



What it should show

Expect clear natural placements for wood, wool, stone, cotton and feather, and man-made for plastic lid, foil, polyester and paperclip. Paper and metal often land in the gap or spark debate — that is useful, not wrong. On the four hard cards, successful talk separates origin (tree, sand, sheep, rubber plant) from the made object; “both” with a reason is a strong outcome.





Misconceptions & interventions

- **Soft things are natural and hard things are man-made.** — Hold wool beside polyester fleece, then stone beside hard plastic. Ask which pair feels alike and which pair came from nature — the test is where it came from, not soft or hard.
- **Foil and paperclips are natural because metal comes from the ground.** — Agree metal is dug up, then say people make it into thin shiny foil or clips — so for today those go on the man-made sheet. Keep the manufacturing story short.
- **A woolly hat is fully natural because wool comes from a sheep.** — On the sorting-tree card, split the idea: the wool is natural; people knit or make the hat. “Both” is right when they can name each part.



Differentiation

- {'emerging': ['Sort two clear items with you first (e.g. wood block and plastic lid) using the reason stems aloud before joining the group tray.', 'Record by drawing only; scribe one dictated word for natural or man-made.']}
- {'developing': ['Add a second reason aloud for one tray item (feel + where it came from).', 'Place one unsure item in the gap and say what would help them decide.']}
- {'proficient': ['Choose one classroom object from the shelf, justify natural, man-made or both, and challenge a partner's placement kindly.', 'On a hard card, name which part is natural and which part people made without being prompted.']}



Cross-curricular hook

Link to oral language: pupils practise because-clauses when they justify each sort to the group.

