

materials

Sorting our materials

Lesson at a glance

Open by holding up a mixed tray of everyday objects and asking whether the ones made of the same stuff can go together — do not name the groups yet. Children notice and gently touch a few objects as a class, then sort real items into wood, plastic and metal hoops at carpet stations, saying why each belongs. An IWB interactive sorts the same kinds of objects as pictures. Close with one drawing per group in the Investigation Journal and a carpet talk on what helped them decide.

Learning objectives

- Sort everyday objects into wood, plastic and metal groups
- Say why an object belongs in its material group

Before the bell – prep

Night before: make picture-cue labels (sticky-note sketches) for wood, plastic and metal. Gather four varied trays and twelve hoops for four carpet stations of 4–6. Per tray: wooden block, spoon or lolly stick, pencil; plastic cup, bottle top, brick; metal spoon, key, clean coin or paperclip. Check no sharp edges or choke hazards. Avoid glass.

**Materials**

Item	Qty	Per	Source	Low-cost substitute
varied objects tray (wood, plastic and metal items, e.g. wooden block, wooden spoon, pencil, plastic cup, bottle top, plastic brick, metal spoon, key, clean coin)	1	class (shared carousel default; 2 if running two stations)	classroom	ask families to send one clean safe object made of wood, plastic or metal
sorting hoops	3	class (shared carousel default; 6 if running two stations)	school kit	three large paper circles or PE spots on the floor
Investigation Journal pages	1	pupil	print from platform	plain paper folded or divided into three drawing spaces labelled with a wood, plastic and metal sample sketch the children already know from the hoops

Safety watch-point

Check every object first: no sharp edges and nothing small enough to fit fully in a mouth. Count items back onto trays; wash hands after handling if needed.

Teaching moves

- **Getting Started:** Hold the physical tray so every child can see the mix. Ask only the one curiosity question — can we put the ones made of the same stuff together? Leave the three empty hoops visible on the carpet. Do not name wood, plastic or metal yet and do not hand objects out.
- **Look and wonder:** Hold up two or three objects one at a time. Ask what it feels like, what colour it is, and what they think it is made of. Accept everyday words (hard, shiny, soft) and gently revoice with the material name when it fits. Talk only — no drawing yet. If someone sorts by colour or size, smile and say we will check by looking and feeling what it is made of.
- **Sort the tray:** Model one full cycle aloud first: wonder, feel, name the material, place it, and say ‘I put it here because...’. Then run short bursts — about 4–5 minutes sorting, a 1-minute whole-class regroup holding up one object, then another 4–5 minutes. Rely on the picture labels. Circulate and prompt the reason stem; the saying-why is half the learning.
- **Sort the pictures:** Drive the sorting interactive on the IWB. Children call out; you drag, or invite one child at a time. After each card ask ‘Do you agree? How could we check?’ and point back to the real tray they just sorted. A wrong hoop is a conversation, not a score — lean on look-and-name and tray memory.
- **Show and draw:** Hand out the Investigation Journal sorting page. Aim for one simple drawing in each material group within about five minutes. Circulate and ask each child to point to one drawing and finish ‘It is wood because...’. If someone has sorted by colour, bring them back to a real tray object, check the material together, then draw that one.
- **Make-sense talk:** Carpet talk, display-only. Keep one focus: what helped us decide where each thing belonged. Draw out looking, feeling, and that wood, plastic and metal are three material groups. Offer stems: ‘I put it with wood because...’ / ‘The metal ones felt...’. Optional one-line close only: a recycling crew sorts materials carefully too — then stop.

What it should show

Most Junior Infants will place clear single-material items correctly once they have felt them — wooden block and spoon in wood, plastic cup and brick in plastic, key and metal spoon in metal. Expect some to start by colour or size; a quick feel of the real object usually resets them. A pencil with a metal band is mostly wood for this sort — praise the noticing, then agree the main material is wood.

**Misconceptions & interventions**

- **‘The red ones go together’ or ‘the big ones go here’ — sorting by colour or size instead of what the object is made of.** — Smile and bring them back to one real object: ‘What does it feel like? What do you think it is made of?’ Revoice into the material group and place it together.
- **‘That’s silver, so it goes in a silver group’ — treating the shiny look of a metal spoon as its own material.** — Hold the spoon beside the key or coin. Feel how cold and hard both are and name them metal together: shiny is how metal can look, not a separate group.
- **A wooden pencil with a metal band confuses children into calling the whole thing metal.** — Praise the band noticing, then ask what most of the pencil is made of. Agree it is mostly wood for today’s sort and place it in the wood hoop.

**Differentiation**

Emerging	Developing	Proficient
• Place a second adult or older buddy at one hoop to model feel-then-place with the stem ‘I put it here because...’. • Offer only clearly single-material objects first and let the child point to the picture label before placing.	• After placing, prompt the full reason stem for every object: ‘I put it here because...’. • At the 1-minute regroup, invite them to hold up one object and tell the class which hoop and why.	• Make them the station ‘checker’ who asks a partner ‘why does it belong?’ before it stays in the hoop. • When they notice a mixed object (pencil band), ask which material is the main one and how they decided.

**Cross-curricular hook**

Links to early Maths sorting and classifying — same and different groups — using the three hoops as concrete sets.