

Make, share and reflect

Lesson at a glance

Hand back each group's Design Brief plan and ask only who the user is and what one job the helper must do. Groups then build a junk-model helper from recycled boxes, card, pots and tubes, joining with tape or glue and trying the job once. They share to a visitor or partner-group user in under a minute, take one kind I-like or I-wonder comment, name one change, and record make, feedback and change on the Investigation Journal page.

Learning objectives

- Make a helper from the plan drafted earlier in this project
- Share with the user, take one piece of kind feedback, and say one thing to change

Before the bell – prep

Night before: set one junk-modelling tray per group (clean boxes, card, pots, paper tubes) plus tape, glue sticks and round-tip scissors. Return each group's plan. Confirm real users (partner class, SNA or adult) or default to neighbour groups so share time is never held up.

Materials

Item	Qty	Per	Source	Low-cost substitute
group Design Brief plans from earlier in this project	1	group	classroom	a quick labelled sketch each group redraws from memory if a plan was lost
clean junk-modelling kit (card, small boxes, paper tubes, pots)	1	group	classroom	newspaper, plain card offcuts and empty clean yoghurt pots
masking tape	1	group	classroom	sticky tape or glue stick joins on paper models
glue sticks	2	group	classroom	masking tape only
round-tip scissors	2	group	classroom	teacher pre-cuts strips; pupils fold and tape only
Investigation Journal page	1	pupil	provided printable	a blank page ruled into three simple parts by the pupil



Safety watch-point

Round-tip scissors only; an adult makes any tricky cuts. Keep floors clear of offcuts, no running with materials, scissors away first at pack-up, wash hands if gluey.



Teaching moves

- **Getting Started:** Hand back plans with the kit still closed. Take one short answer per group to Who is your user? and What one job must the helper do? then move on — design thinking is already done; today needs make time.
- **Make our helper:** Model one tight two-minute cycle aloud on a simple demo helper (wonder, predict, build base then back, try, tweak one fold), then send groups straight to their trays. Circulate with three prompts only: What does your plan say comes first? Which join needs to be strongest? Can you try the helper job once now? At halfway, check every group has a main join and one job trial. Bar for finished enough: matches the plan roughly, one working join, safe to hold — neatness not required.
- **Share our helper:** Invite users only if ready; otherwise switch at once to partner-group users. Model the frame once: Our user is... The problem was... Our helper does... Watch this. Keep each share to 45–60 seconds; with eight groups run two rounds of four. Fold watchers in with What job is this doing? and What kind comment could you give? One I-like or I-wonder only — no scores or ranking. Supply a kind prompt yourself if a group heard nothing clear.
- **Feedback and one change:** Talk only for about two minutes: twenty seconds silent think, twenty with a partner, then two or three pairs aloud. Stems: The feedback I heard was... and Next time I would change... because... Have Investigation Journal pages ready before this step ends.
- **Record on our journal page:** Hand every pupil their page first so the five minutes stay on recording. Keep them to the three headings — what we made, the kind feedback, one thing we would change. A labelled drawing plus a spoken sentence is enough if writing is hard.



What it should show

A successful helper roughly matches the group's plan, has one working main join, can try the named user job once in a simple way, and is safe to hold. Polish and extra features are not required. Groups that never try the job usually spent too long decorating — prompt an early job trial. Odd “failures” in share are often a weak join; that becomes the natural one-change idea.



Misconceptions & interventions

- **Sharing means showing a perfect, polished finished product.** — Say the bar aloud before make time: a clear prototype that does the job once is enough. Point at a rough but working main join and affirm process and listening over neatness.
- **Feedback means saying what is wrong or scoring whose helper is best.** — Model one I like... and one I wonder... only. Stop any ranking and revoice: one kind comment helps the maker improve without feeling criticised.
- **Improve means throwing the helper away and starting a whole new design.** — Link to the key idea: change one part so it works better next time — e.g. more tape at a wobbling join — still for the same user and plan.

Differentiation

Emerging	Developing	Proficient
• Offer pre-cut card strips and a simple fold-and-tape join so the group can finish one working helper that tries the job once. • Accept a labelled drawing plus a spoken sentence to you on the journal page if writing is hard.	• At halfway, prompt Have you joined the main parts yet? and push one clear job trial before share. • Use the stems The feedback I heard was... / Next time I would change... because... in the pair talk.	• Early finishers strengthen one weak join or add one clearer user label, still on the same plan and materials. • Journal stretch: sketch one second improvement on the back of the page for the same user.

Cross-curricular hook

Ties to English oral language: practise kind I-like / I-wonder feedback and clear turn-taking when sharing with a user.