

Practical session 5: Complete the paper design cycle

Mentor Teaching · Teacher directions · 15 October 2026

Plan and prerequisites

55–70 minutes, usually two 45-minute blocks. Planning estimate; adjust to the class.

Check comparable trials, bound a claim, and revise it. The bridge introduces criteria, constraints and predictions.

Print in this order

1. Requirements, model and guided practice

2. Independent challenge: proposal first

3. Independent challenge: new redesign evidence

Give each independent or new-evidence file only at the stage described below. Keep answers with the teacher.

Teach and demonstrate

Teach Requirements, then check every trial, token budget and thickness in the model. Distinguish performance criteria from constraints and state a priority between feasible designs. Guide the tradeoff task.

Learner work and evidence

Give Proposal first and retain the proposal/test plan. Only then reveal New redesign evidence. These are specified fictional designs, not results from students' unbuilt proposals. Collect feasibility, priority, proposed matched test and a revised bounded claim.

Next decision and continuation

Break after guided practice if a second block is needed. Choose Meet every requirement or Propose a relevant test from the response evidence, then its separate fresh recheck. Keep changed-requirements and new-environment later tasks reserved. This paper cycle does not establish physical construction/testing.

Matching complete teacher key

Teacher guide pages 1–5 match the bridge through proposal/reveal; pages 6–8 cover follow-ups and later checks; page 9 gives science/standards limits.

Open the matching complete teacher guide

Access and interpretation

Offer oral, dictated, pointing or labelled responses when they show the same intended reasoning. Keep each task's quantities, conditions and sources available. Allow extra response paper. A supplied-data explanation does not establish actual construction or testing.