

Practical session 4: Explain, then practise claim revision

Mentor Teaching · Teacher directions · 15 October 2026

Plan and prerequisites

75–95 minutes with supervised continuation; often two or three 45-minute blocks. Planning estimate; adjust to the class.

Read changes and distinguish a temperature observation from an explanation. Use the included science bridge.

Print in this order

1. Prerequisite bridge, model and guided practice
2. Independent check
3. Prerequisite bridge and initial model evidence
4. New model evidence and blank revision record
5. Guided practice: initial evidence
6. Guided practice: new evidence

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

Teach and demonstrate

Use the warm-water model and its sample/surroundings representation. State the net energy-transfer direction from warmer to cooler. Guide the separate cooling record. Temperature does not measure total energy; a sleeve can slow transfer without creating cold or stopping all transfer. After the explanation independent response, use the claim-revision bridge and initial model. Retain the original model claim before showing new model evidence; model a reasoned revision. Then guide the separate initial/new practice pair.

Learner work and evidence

Give Explain the record independently after practice. Collect values, change, net transfer direction, the scientific connection and one limit. Retain the guided original claim before new evidence. The revision practice is guided; do not report it as an independent claim-revision assessment.

Next decision and continuation

Finish the explanation independent task before a continuation break. Continue with the revision model and guided pair in the next supervised block. Select either resource's named reteach from the observed need; do not compress both into one short lesson.

Matching complete teacher key

Teacher guide pages 1–5; focused follow-ups on pages 6–7, later key on page 8 and science/source notes on page 9.

Open the matching complete teacher guide

Matching claim-revision key

Use the initial/new model and guided-practice key, pages 1–6.

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.