

Independent challenge · Separate redesign evidence

Read this page after you finish your first proposal. These are specified fictional prototypes, not results for your own unbuilt proposal: J-sealed closes a gap in J with one extra token; K-thin uses a thinner wrap with the same token allowance. Changes are already included in the table. Do not invent a successful result for your proposal.

80 g, start 11°C, room 23°C, 16 min. Final ≤16.5°C in EVERY trial; ≤5 tokens; ≤19 mm added thickness. Covered liquid water; cups/lids, mass, starting temperature, duration, exposure and reading procedure match within and across trials. Surroundings stay at the stated room temperature. No ice, phase change, active heating/cooling, direct sunlight or meaningful evaporative cooling. Each trial uses fresh samples. Accuracy is not supplied.

Supplied design record

Constructed teaching data: these values were invented for this activity, not collected in an experiment.

Design	Tokens	Added mm	Trial 1 final °C	Trial 2 final °C	Trial 3 final °C
J-sealed	4	14	15.5	16	17
K-thin	5	17	15.5	16	16

1. Reassess these prototypes against the original brief. Compare each with its original record on the first page; what must be revised? Is either a demonstrated universal improvement?

2. Retain your original proposal as a hypothesis, or revise it. Explain the evidence needed before claiming its success. Name one conclusion the supplied records cannot establish.