

Fresh recheck · Whole design or one feature?

Fresh matched 100 g samples starting at 11°C; 23°C room; 15 min. New design changes both seam overlap and layer count; all other conditions match. 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.

Paired trial	Old final °C	New final °C
1	17	15
2	16	14
3	17	15

1. What does the full matched record support? Does it show that seam overlap alone caused the difference? Propose evidence that would address that narrower question.

A fair comparison of complete designs can change more than one feature. An isolated feature claim needs a comparison that separates that feature from the others.