

Independent task · New readings

Use the table without repeating the model answer. You may explain aloud, use a labeled diagram or write.

Data I · All samples have 100 g water in a 25°C room, matching cups/lids and measurement method. Each is read after 20 minutes. S has a different starting temperature. This is one trial.

Initial and final water readings

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

Sample	Start (°C)	After 20 min (°C)
Q	14	18
R	14	21
S	20	22

K1-I1. Name quantity, units and interval. Find each change and say whether it warmed or cooled.

K1-I2. Which is cooler at the end, Q or S? Which changed less? Explain why these are different questions.

K1-I3. What comparison of Q and R is supported? Can the lower change of S identify a better thermal protector? Give a limit.