Compare the measurements — response practice

Stage-separated edition · 2 November 2026

Compare the measurements

Read one setup from start to finish before comparing designs. Write ‘start → final’; then decide whether the value rose or fell.

Two separate trials. Fresh 100 g water samples start at 12°C in a 24°C room. Cups, lids, 15-minute exposure, and measurement procedure match. Each row compares sleeves X and Y.

Final water temperatures after 15 minutes

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

Trial	Start (°C)	Sleeve X: final °C	Sleeve Y: final °C
1	12	15	18
2	12	16	18

1. Did either design cool its water? For each trial, write X: start → final → change and Y: start → final → change.

2. Which sleeve showed less warming in both trials? Explain why the smallest final value works here.