

## Solutions

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**2.1** Mean  $A = (4+6+8)/3 = 6$  items; mean  $B = (3+4+5)/3 = 4$  items; difference = 2 items. These means alone do not establish statistical significance, a population effect or a causal design. Inspect variability, allocation and assumptions before choosing analysis. Authored points for identifying relevant evidence, explaining a supported inference and a material limit.

**3.1** Scores are paired within pupils, so analyse within-person differences with an appropriate paired method and assumptions. Randomize or counterbalance order to reduce sequence effects and use comparable material. Paired design is not random sampling and does not ensure generalization. Authored points for a relevant judgement, reason tied to the case and justified qualification or method. Accept a supported alternative.