

3.1 Experimental preparation and data: supported rehearsal

Name: _____ Class: _____ Date: _____ Total: 6 marks

Objective

Supported preparation: Identify variables, sampling and controls in an experiment; Analyse actual data and evaluate a school-approved replication. This is original rehearsal, not completion of the assessed task.

1 Key knowledge and worked examples

Specify the independent variable, dependent measure, allocation, controls and consent before analysis. Standardization reduces avoidable variation; random assignment differs from random sampling. Actual approved replication data must be retained, not replaced by illustrative numbers.

Original source / task evidence

Rehearsal: fictional recall scores are 4, 6, 8 for format A and 3, 4, 5 for B. Calculate means and state what cannot follow from them.

Separate what is stated from the interpretation.
Experimental preparation and data

Rehearsal: fictional recall scores are 4, 6, 8 for format A and 3, 4, 5 for B. Calculate means and state what cannot follow from them.

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.

2 Practice

2.1 For the worked case, identify the evidence and a conclusion it can support. Explain one material limit. [3]

3 Exam-style questions

3.1 The same pupils complete both recall formats. What changes in design and analysis? Give a reasoned answer, evidence or method, and a relevant qualification. [3]