

Your investigation

Planning a fair test · dealing with odd repeats · evaluating and improving a method

SCORE

/10

Name

Class

Due

Do Now

REMEMBER

From earlier lessons · 1 mark each

1

Explain why control variables must be kept the same.

[1]

2

State how uncertainty is calculated from a set of repeated readings.

[1]

3

What is an anomalous result?

[1]

Key ideas

LESSONS 7–8

Show your working

4

A group investigates how the **length of a pendulum** affects the **time for 10 swings**.

[1]

a

Name two control variables.

[1]

b

Explain why they time 10 swings instead of one.

[1]

5

One row of their results:

Length / cm	Trial 1 / s	Trial 2 / s	Trial 3 / s	Mean / s
40	12.6	12.8	15.9	

a

Which trial is anomalous?

Trial 1

Trial 2

Trial 3

[1]

b

Calculate the mean, leaving out the anomalous result. Write it in the table.

[1]

6

Evaluate the method: give **one** improvement, and explain how it makes the results better.

[2]

7

Their graph is a curve. Should they join the points dot-to-dot?

yes

no

Give the reason.

[1]