

PREP 3 • LESSONS 5–6

The point that does not fit

Best-fit lines • anomalous results • conclusions • directly proportional

 SCORE
/10

Name _____ Class _____ Due _____

Do Now REMEMBER

From earlier lessons • 1 mark each

1 Describe the effect of a systematic error on a set of readings. [1]

2 State which variable is plotted on the x-axis of a graph. [1]

3 State two things every axis of a graph must have. [1]

Key ideas LESSONS 5–6

Show your working

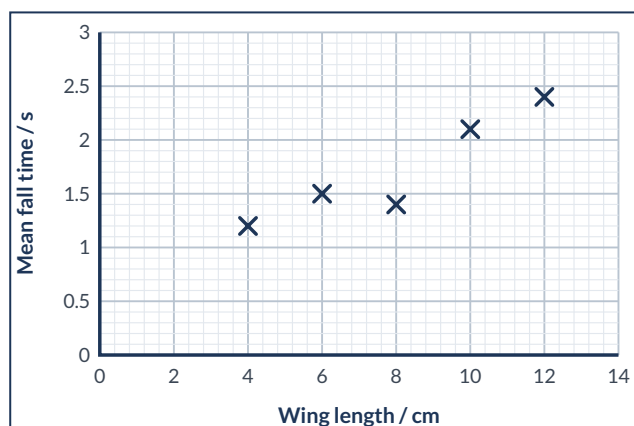
4 A student drops paper helicopters with different wing lengths and times how long each takes to fall. The graph shows the mean fall times.

a Draw a ring around the anomalous result. [1]

b Draw a best-fit line. [1]

c What should the student do about the anomalous result? [1]

d Is fall time directly proportional to wing length? [1]

☐ yes ☐ no Explain.


5 Write a conclusion for this investigation. Use values from the graph. [2]

6 The student timed each drop with a stopwatch. Name one random error and how to reduce it. [1]