

PREP 2 · LESSONS 3–4

Drop tests and ramps

Repeats and means · bar charts · choosing a scale · plotting a line graph

SCORE

/10

Name

Class

Due

Do Now

REMEMBER

From earlier lessons · 1 mark each

1

Define accuracy.

[1]

2

What is the independent variable?

[1]

3

Name the type of graph used when the independent variable is continuous.

[1]

Key ideas

LESSONS 3–4

Show your working

4 A ball is dropped onto three materials. The table shows its bounce height.

Material	Trial 1 / cm	Trial 2 / cm	Trial 3 / cm	Mean / cm
Foam	12	14	13	13
Bubble wrap	20	23	20	
Carpet	31	28	31	30

- a Calculate the mean bounce height for bubble wrap. Write it in the table. [1]
- b Which material is the best shock absorber? Give the reason. [1]
- c Explain why these results are shown on a bar chart. [1]

5 In the ramp practical, a trolley leaves a ramp and travels across the floor.

Ramp height / cm	5	10	15	20	25
Mean distance / cm	22	41	63	80	101

- a Plot the last two points on the graph. [2]
- b On a different graph, the largest value on the y-axis is 118 cm and there are 10 big squares. Draw a ring around the best value for each big square:

10 cm

15 cm

20 cm

50 cm

[1]
- c Name one control variable in the ramp practical. [1]

