Scatter GRAPHS PPOL'S

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s on an elastic hand and measures the distance

(í)

In a science lesson Jessica hangs some weights on an elastic band and measures the distances between the weights and the workbench. The table below shows her results.

Weight (g)	60	110	30	80	60	100	90	120	40	110
Distance between weight and workbench (cm)	12	6	16	10	14	9	5	7	13	8

(a) On the grid below, draw a scatter diagram to show these results.



(2) A ps

A psychologist asks some people how many times they have wired a plug. Each person is then asked to wire a plug and the time taken is recorded. The mean number of times people have wired a plug is 6. The mean time taken to wire a plug is 10 minutes.

The scatter diagram below shows the number of times a person has wired a plug and the time taken to wire a plug for each of 10 people.



Turn over.



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[1]

[2]

[1]



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The engine capacity, measured in cubic centimetres (c.c.) and the time, in seconds, taken to accelerate to a certain speed, for each of 8 cars, are given in the table.

Engine capacity (c.c.)	1000	1100	1200	1300	1400	1600	1800	2000
Acceleration time (s)	15.4	14.0	13.4	11.4	11.8	9.1	6.9	6.0

(a) On the graph paper opposite, draw a scatter diagram to display these results.

(b) What type of correlation does your scatter diagram show?

(c) The mean engine capacity is 1425 c.c. and the mean acceleration time is 11 seconds. Draw a line of best fit on your scatter diagram.

(d) Use your line of best fit to estimate the acceleration time for a car with an engine capacity of 1750 c.c.

[1]

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