

WALT Learn to read scatter plots

Success Criteria I can see the trend in which the points are moving

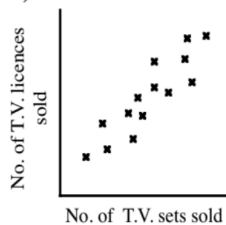
I can list Negative and Positive correlation

Strength of the graph

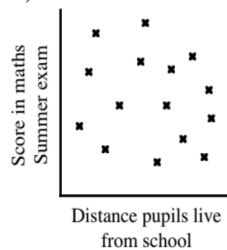
Draw each of the scatter graphs. Use Trends, association, strength, (The graph shows linear, positive/negative - strong, moderate or weak tendency) groupings/clusters and any unusual points. (for eg no unusual points are found)

D. Draw each scatter graph. Next to each one write what it describes.

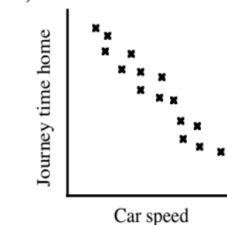
1).



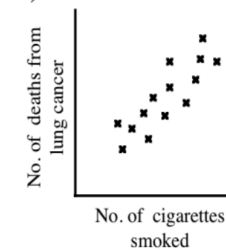
2).



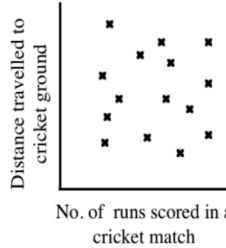
3).



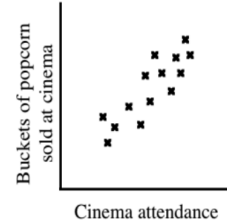
4).



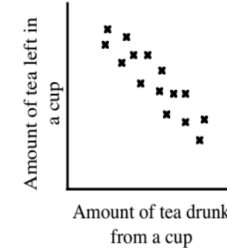
5).



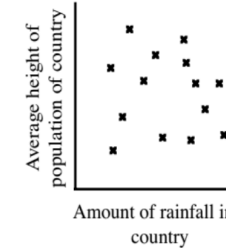
6).



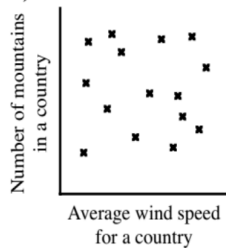
7).



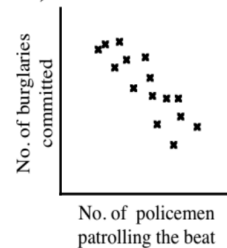
8).



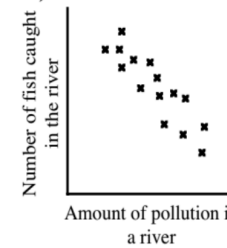
9).



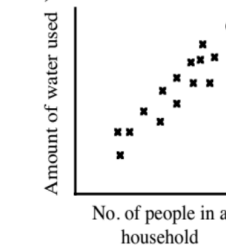
10).



11).



12).



Complete the following scatter graphs



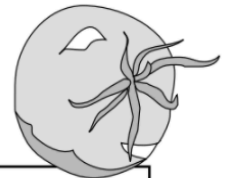
Correlation 2.



- A. 1). The height (cm) of young tomato plants were measured and the number of leaves on each plant counted. This information is below.

Height (cm)	6	28	19	22	10	16	14	23	9	26	18	24	21	12	20	17	14
No. of leaves	1	16	8	4	2	7	5	11	3	15	10	13	12	5	11	9	6

- Plot this information on a scatter graph.
- Comment on the correlation of this graph.
- If a plant has 10 leaves, use your graph to estimate the height you would expect it to be.
- If a plant was 12 cm tall, use your graph to estimate the number of leaves you would expect it to have.
- There is one plant that does not appear to fit in, which one is it ?



- 2). A class sits two maths papers out of 80. Here are the results.

Paper 1	76	30	21	39	60	30	49	38	64	69	51	34	55	26	44	59	42
Paper 2	80	48	25	41	59	23	56	28	70	71	51	31	57	22	44	65	38

- Plot this information on a scatter graph.
- Comment on the correlation of this graph.
- One pupil missed Paper 2, but scored 62 on Paper 1. Use your graph to estimate the mark you would expect this pupil to get on Paper 2.
- Another pupil missed Paper 1, but scored 29 on Paper 2. Use your graph to estimate the mark you would expect this pupil to get on Paper 1.
- One pupil didn't feel well for paper 1. Look at your scatter graph and say which one it is ?

- 3). Bill recorded the maximum speed he reaches and the journey time to work every day.

Journey Time	39	3	16	30	11	34	19	26	6	13	20	23	27	34	9	31	37
Max. speed	5	48	34	17	42	34	26	22	44	37	29	25	19	13	40	15	9

- Plot this information on a scatter graph.
- Comment on the correlation of this graph.
- If Bill's journey takes 25 minutes, find a good estimate of his maximum speed.
- If Bill's maximum speed is 35 Km/h, give an estimate for the length of his journey time.
- One day Bill was diverted and had to go a longer way home.
Which plot on your graph was this ?

