Scatter Plots for Bivariate Data - Step-by-Step Lesson

Data for 10 students' History and Zoography test scores are provided in the chart. Describe the association between the History and Zoography scores.

Student	1	2	3	4	5	6	7	8	9	10
History	60	55	80	39	50	20	75	68	49	90
Zoography	69	70	80	39	60	25	70	60	40	96

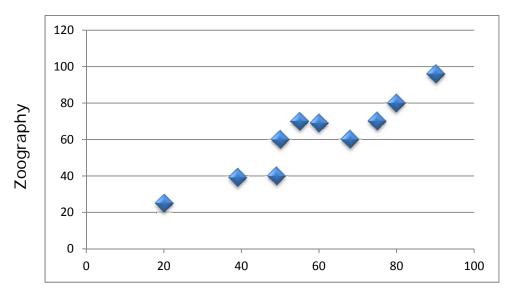
Explanation:

A scatter plot shows a positive trend if *y* tends to increase as *x* increases or y tends to decrease as the x decreases.

A scatter plot shows a negative trend if one value tends to increase and the other tends to decrease.

A scatter plot shows no trend if there is no obvious pattern.

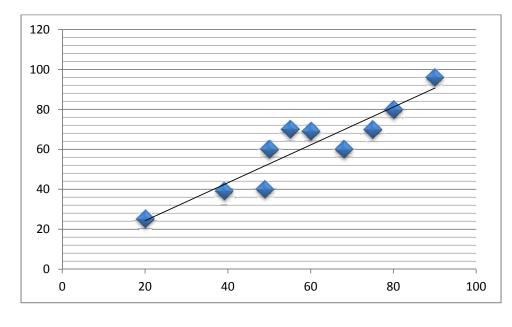
Let's make a scatter plot to get an idea of the relationship:



History

Interpret the trend in the graph.

Zoography



History

The line shows that there is a positive slope. So it is positive association.

This would indicate that if you have a high History grade, you would also have a high Zoography grade.