



## Linear Relationships in Scatter Plots

### Today's Standard

8.SP.A2 - Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.

Cues	Notes
What is a scatter plot?	A scatter plot is a graph that shows the relationship between two quantitative variables using points.
What is a line of best fit?	A line of best fit is a straight line that best represents the data on a scatter plot.
How do you assess the fit of a line?	Assessing the fit involves judging how close the data points are to the line.
Why are straight lines used in data modeling?	Straight lines are used because they simplify the relationship between variables and make predictions easier.
What are common misconceptions about linear fit?	Common misconceptions include thinking all data fits perfectly to a line and that the line must pass through all points.

### Summary

Understanding scatter plots and lines of best fit is crucial for modeling relationships between variables. This involves fitting a line to data points and assessing its accuracy, while avoiding common misconceptions about linear relationships.