

8th Grade - Unit 9: Math - Data Analysis

Content Area: **Mathematics**
Course(s): **Math 6, Generic Course**
Time Period: **Generic Time Period**
Length: **#10 days**
Status: **Published**

Established Goals/Standards

Please choose the appropriate Goals/Standards from the Standards tab above.

MA.8.SP	Statistics and Probability
MA.8.SP.A	Investigate patterns of association in bivariate data.
MA.8.SP.A.1	Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.
MA.8.SP.A.2	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 (e.g. line of best fit) by judging the closeness of the data points to the line.
MA.8.SP.A.3	Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept.
MA.8.SP.A.4	Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables.

Essential Questions

Please add your Essential Questions by clicking on the Lists tab above.

- How can information from a problem be represented in a way to see a pattern or a frequency?
- What is a line a best fit?

Enduring Understanding

Please add your Enduring Understandings by clicking on the Lists tab above.

- A line of best fit is a line that shows the general direction that a series of seems to be heading.
- Scatter plots, line of best fit, and frequencies all help interpret data within a problem.

Content

Students will be to:

- Interpret and make a scatterplot

- Describes patterns in a scatterplot
- Assess the fit of a trend line on a scatterplot
- Construct and interpret two way frequency tables.

Vocabulary:

- Bivariate data
- Clustering
- Frequency
- Negative association
- Positive association
- No association
- Outlier
- Relative frequency
- Scatterplot
- Trend line
- Two way table

Assessment

Resources

- Savvas enVision textbook and online resources
- Teacher made flip-charts
- Web-based activities (mathplayground.com) (coolmath.com)
- Teacher made worksheets/assessments
- mad minutes
- NJCTL.org (PMI math)
- Pizzazz series of worksheets