

Course Title/ Course #: Math Grade 7/8

Unit Title/ Marking Period # (MP): 4

Start day:

Meetings (Length of Unit): 8 days

<i>Desired Results ~ What will students be learning?</i>
<u>Standards of Learning/ Standards</u>
SOL 8.13 The student will: <ol style="list-style-type: none">make comparisons, predictions, and inferences, using information displayed in graphs; andconstruct and analyze scatterplots
<u>Essential Understandings/ Big Ideas</u>
<ul style="list-style-type: none">Why do we estimate a line of best fit for a scatterplot? <i>A line of best fit helps in making interpretations and predictions about the situation modeled in the data set.</i>What are the inferences that can be drawn from sets of data points having a positive relationship, a negative relationship, and no relationship? <i>Sets of data points with positive relationships demonstrate that the values of the two variables are increasing. A negative relationship indicates that as the value of the independent variable increases, the value of the dependent variable decreases.</i>
<u>Key Essential Skills and Knowledge</u>
SOL 8.13 The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to: <ul style="list-style-type: none">Collect, organize, and interpret a data set of no more than 20 items using scatterplots. Predict from the trend an estimate of the line of best fit with a drawing.Interpret a set of data points in a scatterplot as having a positive relationship, a negative relationship, or no relationship.

Vocabulary	
Academic Vocabulary	Content Vocabulary
Bar Graph Line Plot Histogram Prediction Frequency Table Stem-And-Leaf Plot Scattergram (Scatterplot) Line Graph Box-And-Whisker Plot	Mean Inference Median Mode Graph Survey Circle Analyze Comparison
<i>Assessment Evidence ~ What is evidence of mastery? What did the students master & what are they missing?</i>	
<u>Assessment/ Evidence</u>	
<ul style="list-style-type: none"> • Mulligan Math check points SOL 8.13 • Interactive Achievement • Compass Learning <ol style="list-style-type: none"> 1. M7247 2. M7250 3. M7267 4. M7270 • Histograms Quiz= • Misleading Graphs and Statistics Quiz= 	
<i>Learning Plan ~ What are the strategies and activities you plan to use?</i>	
<u>Learning Experiences/ Best Practice</u>	
Teacher Resources: <ul style="list-style-type: none"> • Create a Frayer model on the different types of graphs. • Cornell Notes in interactive notebook • Guided Practice 	
Text Virginia Math Connects, Course 3, ©2012, Price, et al, McGraw-Hill School Education Group: page(s) P20-P21, 380-385, and 798-	

810.

Coach book Grade 8 Virginia Gold edition: page(s) 118-135.

Technology Integrations

Compass Learning:

- [Data Analysis](#) (7245, 7246, 7265, 7266)

Gizmo:

- [Histograms](#)
- [Trends in Scatterplots](#)-Interactive Instructional Resource
- [Stem and Leaf Plot](#)-Interactive Instructional Resource

Brain Pop:

- [Graphs](#)

Smart Exchange:

- [Graphs, Charts, and Analysis of Data Part 1](#) [SMART Notebook lesson]
- [Graphs, Charts, and Analysis of Data Part 2](#) [SMART Notebook lesson]

Resources

Virginia Department of Education

- [Objective 8.13a Lesson Plans VDOE](#)
- [Objective 8.13b Lesson Plans VDOE](#)

Other Sites

- [Interactive Scatterplot](#)
- [Practice with Scatter Plots and More](#)
- [Histogram Notes](#)
- Thatquiz.org-[Graphs](#)-Interactive Skills Practice
- [Henrico 8.13](#)

Cross Curricular Connection

Science and Technology:

Have students define the steps of an experiment.

Social Studies:

Have students define the strategy Lincoln took on determining how to abolish slavery.

English:

Have students write a paper explaining how to analyze a graph.

Materials**Manipulatives**

- Color Tiles
- Number Cubes
- Spinners
- Fraction Models
- 2-Color Counters
- Graph Paper

Technology Resources

- LCD Projector
- Speakers
- Computer w/Internet Connection and SmartBoard Software
- SmartBoard
- Computer Cart

Student Supplies

- Whiteboards/Markers
- Pencil and Paper
- Student Notes
- Guided Notes