Unit 5: Data Collection And Analysis

Content Area: **Template**
Course(s):
Time Period: **Full Year**
Length: **7 weeks**
Status: **Published**

UNIT RATIONALE

This unit is designed to support students in data collection and analysis. Students will recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. Inturn, they will describe the nature of the attribute under investigation, including how it was measured and its units of measurement. Students will display numerical data in plots on a number line, including dot plots, number lines, histograms and summarize numerical data sets in relation to their context. Students will learn to relate visual aspects of a data display to mathematical properties of the data. Students will analyze dot plots and histograms to cull as much information as possible from them. Students will display numerical data in plots on a number line, including box plots. Students will learn to compute the mean absolute deviation (MAD).Students learn to use measures of variability to describe a data set. Finally, students will understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.

ESSENTIAL QUESTIONS

How do mathematicians identify a statistical question and describe data?

How do mathematicians Use dot plots to display data?

How do mathematicians Make histograms and frequency tables to display data?

How do mathematicians describe a set of data using mean, median, and mode?

How do mathematicians choose an appropriate measure of center to describe a data set?

How do mathematicians describe overall patterns in a data set?

How do mathematicians use box plots to display data?

How do mathematicians determine and use the mean absolute deviation of a set of data points?

How do mathematicians summarize a set of data by using range, interquartile range, and mean absolute deviation?

How do mathematicians describe the distribution of a data set collected to answer a statistical question?

STANDARDS

NEW JERSEY STUDENT LEARNING STANDARDS: CONTENT AREA

MA.6.RP.A.3b	Solve unit rate problems including those involving unit pricing and constant speed.

MA.6.NS.B.3	Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.
MA.6.NS.C.6a	Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., –(–3) = 3, and that 0 is its own opposite.
MA.6.NS.C.6c	Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.
MA.6.EE.A.2c	Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).
MA.6.EE.A.3	Apply the properties of operations to generate equivalent expressions.
MA.6.EE.B.5	Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
MA.6.EE.B.6	Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
MA.6.EE.C.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.
MA.6.G.A.1	Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
MA.6.G.A.2	Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = Bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
MA.6.G.A.3	Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
MA.6.G.A.4	Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.
MA.6.SP.A.1	Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.
MA.6.SP.A.2	Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
MA.6.SP.A.3	Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.
MA.6.SP.B.4	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
MA.6.SP.B.5a	Reporting the number of observations.

MA.6.SP.B.5b	Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.
MATH.6.SP.B.5.c	Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
MA.6.SP.B.5c	Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
MA.6.SP.B.5d	Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.
MATH.6.SP.B.5.d	Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

NEW JERSEY STUDENT LEARNING STANDARDS: CAREER READINESS, LIFE LITERACIES AND KEY SKILLS

TECH.9.4.8.CI.2	Repurpose an existing resource in an innovative way (e.g., 8.2.8.NT.3).
TECH.9.4.8.CT.2	Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option (e.g., MS-ETS1-4, 6.1.8.CivicsDP.1).
TECH.9.4.8.TL.3	Select appropriate tools to organize and present information digitally.
TECH.9.4.8.IML.4	Ask insightful questions to organize different types of data and create meaningful visualizations.

NEW JERSEY STUDENT LEARNING STANDARDS: COMPUTER SCIENCE AND DESIGN THINKING

CS.6-8.2-AP-10	Use flowcharts and/or pseudocode to address complex problems as algorithms.

PRE-ASSESSMENTS

Module 17: Data Collection and Displays "Are You Ready?" pg 562

Module 18: Variability and Data Distribution "Are You Ready?" pg 600

INSTRUCTIONAL PLAN

MODULE 17

Module 17: Data Collection and Displays

LESSON 17.1

Student Learning Intentions (SLI) WALT: (We are learning to…)	17.1 We are learning to identify a statistical question and describe data.
Student Learning Strategies	Construct a Line Plot to Organize Data Construct a Table to Organize Data
Success Criteria	I can identify a statistical question, and I can describe the attributes of a data set.
Formative Assessment (drives instructional decisions)	Turn and Talk (pgs. 563, 564) Check Understanding (pg. 565) Exit Ticket (TM pg. 566)
Activities and Resources	**Warm Up:** Activate Prior Knowledge (TM pg. 563B) **Mini-Lesson:** Spark Your Learning (TM pg. 563D) Build Understanding (p. 563-564) **Guided Practice:** Check Understanding (pg. 565) **Independent Practice:** On Your Own (pg.566) Exit Ticket (TM pg. 566) Teacher Resources Into Math Teacher Edition Module 17 & Online Resources
Suggested Modifications	Plan for Differentiated Instruction (TM pg. 563C)

MATH.6.RP.A.1	Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.
MATH.6.EE.C.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.
MA.6.G.A.1	Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
MA.6.G.A.2	Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = Bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
MA.6.SP.B.5a	Reporting the number of observations.

MA.6.SP.B.5b	Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.

LESSON 17.2

Student Learning Intentions (SLI) WALT: (We are learning to…)	17.2 We are learning to use dot plots to display data.
Student Learning Strategies	Construct a Line Plot to Organize Data Construct a Table to Organize Data
Success Criteria	I can make a dot plot to display data, and use a dot plot to answer questions about data.
Formative Assessment (drives instructional decisions)	Turn and Talk (pgs. 569, 570) Check Understanding (pg. 571-573) Exit Ticket (TM pg. 574)
Activities and Resources	**Warm Up:** Activate Prior Knowledge (TM pg.569B) **Mini-Lesson:** Spark Your Learning (TM pg. 569D) Build Understanding (p. 569-570) **Guided Practice:** Check Understanding (pg. 570) **Independent Practice:** On Your Own (pg. 571-574) Exit Ticket (TM pg. 574) Teacher Resources Into Math Teacher Edition Module 17 & Online Resources
Suggested Modifications	Plan for Differentiated Instruction (TM pg. 569C)

MA.6.EE.A.2c	Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).
MA.6.EE.B.6	Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
MA.6.G.A.2	Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = Bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
MA.6.SP.B.4	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.

LESSON 17.3

Student Learning Intentions (SLI) WALT: (We are learning to…)	17.3 We are learning to make histograms and frequency tables to display data.
Student Learning Strategies	Construct a Bar Graph Organize Data Construct a Table to Organize Data
Success Criteria	I can make a histogram and frequency table, and I can answer questions about data displayed in these ways
Formative Assessment (drives instructional decisions)	Turn and Talk (pgs. 577, 578) Check Understanding (pg. 579) Exit Ticket (TM pg. 582)
Activities and Resources	**Warm Up:** Activate Prior Knowledge (TM pg. 577B) **Mini-Lesson:** Spark Your Learning (TM pg. 577D) Build Understanding (p. 577-578) **Guided Practice:** Check Understanding (pg. 579) **Independent Practice:** On Your Own (pg. 580-582) Exit Ticket (TM pg. 582) Teacher Resources Into Math Teacher Edition Module 17 & Online Resources
Suggested Modifications	Plan for Differentiated Instruction (TM pg. 577C)

MA.6.RP.A.3b	Solve unit rate problems including those involving unit pricing and constant speed.
MA.6.NS.B.3	Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.
MA.6.SP.A.2	Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
MA.6.SP.B.4	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
MA.6.SP.B.5d	Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

LESSON 17.4

Student Learning Intentions (SLI) WALT: (We are learning to…)	17.4 We are learning to describe a set of data using mean, median, and mode.

Student Learning Strategies	Estimation
Success Criteria	I can find the mean, median, and mode of a set of data.
Formative Assessment (drives instructional decisions)	Turn and Talk (pgs. 585, 586) Check Understanding (pg. 586) Exit Ticket (TM pg. 588)
Activities and Resources	**Warm Up:** Activate Prior Knowledge (TM pg. 585B) **Mini-Lesson:** Spark Your Learning (TM pg.585D) Build Understanding (p. 585-586) **Guided Practice:** Check Understanding (pg. 586) **Independent Practice:** On Your Own (pg. 587) Exit Ticket (TM pg. 588) Teacher Resources Into Math Teacher Edition Module 17 & Online Resources
Suggested Modifications	Plan for Differentiated Instruction (TM pg.585C)

MA.6.NS.C.6c	Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.
MA.6.EE.C.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.
MA.6.G.A.1	Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
MA.6.G.A.4	Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.
MA.6.SP.A.3	Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.
MA.6.SP.B.4	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
MA.6.SP.B.5a	Reporting the number of observations.
MA.6.SP.B.5c	Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
MA.6.SP.B.5d	Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

LESSON 17.5

Student Learning Intentions (SLI) WALT: (We are learning to…)	17.5 We are learning to choose an appropriate measure of center to describe a data set
Student Learning Strategies	Estimation
Success Criteria	I can choose an appropriate measure of center to describe a data set.
Formative Assessment (drives instructional decisions)	Turn and Talk (pgs. 591) Check Understanding (pg. 592) Exit Ticket (TM pg. 594)
Activities and Resources	**Warm Up:** Activate Prior Knowledge (TM pg. 591B) **Mini-Lesson:** Spark Your Learning (TM pg. 591D) Build Understanding (p. 591-592) **Guided Practice:** Check Understanding (pg. 592) **Independent Practice:** On Your Own (pg. 593) Exit Ticket (TM pg. 594 Teacher Resources Into Math Teacher Edition Module 17 & Online Resources
Suggested Modifications	Plan for Differentiated Instruction (TM pg. 591C)

MA.6.EE.C.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.
MA.6.G.A.4	Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.
MA.6.SP.B.4	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
MA.6.SP.B.5d	Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

MODULE 18

Module 18: VARIABILITY AND DATA DISTRIBUTION

LESSON 18.1

Student Learning Intentions (SLI) WALT: (We are learning to…)	18.1 We are learning to describe overall patterns in a data set.
Student Learning Strategies	Use a Dot Plot to Display Data Use Tables to Display Data
Success Criteria	I can use a dot plot or histogram to describe the overall patterns in a data set, including clusters, gaps, peaks, and symmetry.
Formative Assessment (drives instructional decisions)	Turn and Talk (pgs. 601, 602) Check Understanding (pg. 603) Exit Ticket (TM pg. 604)
Activities and Resources	**Warm Up:** Activate Prior Knowledge (TM pg. 601B) **Mini-Lesson:** Spark Your Learning (TM pg. 601D) Build Understanding (p. 601-602) **Guided Practice:** Check Understanding (pg. 427)**Independent Practice:** On Your Own (pg. 603) Exit Ticket (TM pg. 604) Teacher Resources Into Math Teacher Edition Module 18 & Online Resources
Suggested Modifications	Plan for Differentiated Instruction (TM pg. 601C)

MA.6.EE.A.2c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including

	those involving whole number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).
MA.6.EE.A.3	Apply the properties of operations to generate equivalent expressions.
MA.6.EE.C.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.
MA.6.SP.B.4	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
MA.6.SP.B.5c	Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.

LESSON 18.2

Student Learning Intentions (SLI) WALT: (We are learning to…)	18.2 We are learning to use box plots to display data.
Student Learning Strategies	Use the Mean or Median Use Mental Math
Success Criteria	I can make a box plot for a set of numerical data.
Formative Assessment (drives instructional decisions)	Turn and Talk (pgs. 607, 608) Check Understanding (pg. 610) Exit Ticket (TM pg. 612)
Activities and	**Warm Up:** Activate Prior Knowledge (TM pg. 607B) **Mini-Lesson:** Spark Your Learning (TM pg. 607D)

Resources	Build Understanding (p. 608-610) **Guided Practice:** Check Understanding (pg. 610)**Independent Practice:** On Your Own (pg. 611) Exit Ticket (TM pg. 612) Teacher Resources Into Math Teacher Edition Module 18 & Online Resources
Suggested Modifications	Plan for Differentiated Instruction (TM pg. 607C)

MA.6.EE.B.5	Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
MA.6.SP.A.1	Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.
MA.6.SP.B.4	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
MA.6.SP.B.5c	Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
MA.6.SP.B.5d	Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

LESSON 18.3

Student Learning Intentions (SLI) WALT: (We are learning to…)	18.3 We are learning to determine and use the mean absolute deviation of a set of data points.
Student Learning Strategies	Use a Dot Plot to Display Data Use Tables to Display Data
Success Criteria	I can compute the MAD of a data set and use the MAD to describe data.

Formative Assessment (drives instructional decisions)	Turn and Talk (pgs. 615) Check Understanding (pg. 616) Exit Ticket (TM pg. 618)
Activities and Resources	**Warm Up:** Activate Prior Knowledge (TM pg. 615B) **Mini-Lesson:** Spark Your Learning (TM pg. 615D) Build Understanding (p. 615-616) **Guided Practice:** Check Understanding (pg. 616)**Independent Practice:** On Your Own (pg. 617) Exit Ticket (TM pg. 618) Teacher Resources Into Math Teacher Edition Module 18 & Online Resources
Suggested Modifications	Plan for Differentiated Instruction (TM pg. 615C)

MA.6.EE.B.5	Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
MA.6.G.A.2	Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = Bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
MA.6.G.A.3	Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
MA.6.SP.A.3	Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.
MA.6.SP.B.5c	Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
MA.6.SP.B.5d	Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

LESSON 18.4

Student Learning Intentions (SLI) WALT: (We are learning to…)	18.4 We are learning to summarize a set of data by using range, interquartile range, and mean absolute deviation.
Student Learning Strategies	Use a Dot Plot to Display Data Use Tables to Display Data
Success Criteria	I can interpret the range, IQR, and MAD of a data set
Formative Assessment (drives instructional decisions)	Turn and Talk (pgs. 621) Check Understanding (pg. 622) Exit Ticket (TM pg. 624)
Activities and Resources	**Warm Up:** Activate Prior Knowledge (TM pg. 621B) **Mini-Lesson:** Spark Your Learning (TM pg. 621D) Build Understanding (p. 621-622) **Guided Practice:** Check Understanding (pg. 622)**Independent Practice:** On Your Own (pg. 623) Exit Ticket (TM pg. 624) Teacher Resources Into Math Teacher Edition Module 18 & Online Resources
Suggested Modifications	Plan for Differentiated Instruction (TM pg. 621C)

MA.6.SP.A.2	Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
MA.6.SP.A.3	Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.

MA.6.SP.B.4	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
MATH.6.SP.B.5.c	Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
MATH.6.SP.B.5.d	Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

LESSON 18.5

Student Learning Intentions (SLI) WALT: (We are learning to…)	18.5 We are learning to describe the distribution of a data set collected to answer a statistical question.
Student Learning Strategies	Use a Dot Plot to Display Data Use Tables to Display Data
Success Criteria	I can choose an appropriate display for a data set and compute the measures of center and variability.
Formative Assessment (drives instructional decisions)	Turn and Talk (pgs. 627) Check Understanding (pg. 628) Exit Ticket (TM pg. 630)
Activities and Resources	**Warm Up:** Activate Prior Knowledge (TM pg. 627B) **Mini-Lesson:** Spark Your Learning (TM pg. 627D) Build Understanding (p. 627-628) **Guided Practice:** Check Understanding (pg. 628)**Independent Practice:** On Your Own (pg. 629) Exit Ticket (TM pg. 630) Teacher Resources Into Math Teacher Edition Module 18 & Online Resources

Suggested Modifications	Plan for Differentiated Instruction (TM pg. 627C)

MA.6.NS.C.6a	Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., –(–3) = 3, and that 0 is its own opposite.
MA.6.EE.C.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.
MA.6.G.A.1	Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
MA.6.SP.A.1	Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.
MA.6.SP.A.2	Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
MA.6.SP.B.5c	Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
MA.6.SP.B.5d	Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

REFLECTIONS

INTERDISCIPLINARY CONNECTIONS: NEW JERSEY STUDENT LEARNING STANDARDS FOR ELA, SOCIAL STUDIES, SCIENCE AND/OR MATHEMATICS