EVERGREEN COMMUNITY CHARTER SCHOOL CURRICULUM

MATH

Course: Math
Grade: 6

Make sense of problems and persevere in solving them. Reason abstractly and quantitatively.
Construct viable arguments and critique the reasoning of others. Model with mathematics.
Use appropriate tools strategically. Attend to precision.
Look for and express regularity in repeated reasoning. Look for and make use of structure.

PA Common Core Standards	Materials	Methods/Assessment
CC.2.1.6.D.1 Understand ratio concepts and use ratio reasoning to solve problems. **CC.2.1.6.E.1 Apply and extend previous understandings of multiplication and division to divide fractions by fractions.** **CC.2.1.6.E.2 Identify and choose appropriate processes to compute fluently with multi-digit numbers.** **CC.2.1.6.E.3 Develop and/or apply number theory concepts to find common factors and multiples.** **CC.2.1.6.E.4 Apply and extend previous understandings of numbers to the system of rational numbers.** **CC.2.2.6.B.1 Apply and extend previous understandings of arithmetic to algebraic expressions.** **CC.2.2.6.B.2 Understand the process of solving a one-variable equation or inequality and apply to real-world and mathematical problems.** **CC.2.2.6.B.3 Represent and analyze quantitative relationships between dependent and independent variables.** **CC.2.3.6.A.1 Apply appropriate tools to solve real-world and mathematical problems involving area, surface area, and volume.** **CC.2.4.6.B.1 Demonstrate an understanding of statistical variability by displaying, analyzing, and summarizing distributions.**	**Materials:** Illustrative Mathematics: McGraw-Hill and supplementary workbooks **Resources:** • PDE SAS portal: http://www.pdesas.org • Teacher generated/differentiated instruction resources and activities • PSSA released state sample questions • http://www.khanacademy.org/ • Calculators • Learnzillion.com • PBS learningmedia.org • Nces.ed.gov • Arcademics.com • Mathplayground.com • DESMOS **Differentiation:** **Enrichment** • Leveled tests and quizzes • Self-paced **Remediation** • One on one • Quiz & test corrections • Accommodations • Adapted assignments • Extra time • Math Support	**Methods:** • Lecture • Demonstration • Note-taking • Discussion • Practice **Assessment:** • Observation • Participation • Notes/Portfolios • Homework • Question & Answer • Quizzes • Tests • Think-Pair-Share • Whiteboards • At the bell activities • Math Counts activities • Constructed Response **Tasks** • CDTs • PSSAs

EVERGREEN COMMUNITY CHARTER SCHOOL CURRICULUM

MATH

Course: Math
Grade: 6

Make sense of problems and persevere in solving them. Reason abstractly and quantitatively.
Construct viable arguments and critique the reasoning of others. Model with mathematics.
Use appropriate tools strategically. Attend to precision.
Look for and express regularity in repeated reasoning. Look for and make use of structure.

PSSA Eligible Content	Materials/Unit	Methods/Assessment
• M06.B-E.1.1.1 Write and evaluate numerical expressions involving whole-number exponents. • M06.B-E.1.1.2 Write algebraic expressions from verbal descriptions. • M06.B-E.1.1.3 Identify parts of an expression using mathematical terms (e.g., sum, term, product, factor, quotient, coefficient, quantity). • M06.B-E.1.1.4 Evaluate expressions at specific values of their variables, including expressions that arise from formulas used in real-world problems. • M06.B-E.1.1.5 Apply the properties of operations to generate equivalent expressions. • 6.EE.A.1. Write and evaluate numerical expressions involving whole-number exponents. • 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. • 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.	**Materials:** Illustrative Mathematics: McGraw-Hill and supplementary workbooks Pdesas.org **Chapter 1 – Area and Surface Area**	**Methods:** ● Lecture ● Demonstration ● Note-taking ● Discussion ● Practice ● Problem-based Instruction ● Hands-on exploration ● Small Group activities **Assessment:** ● Observation ● Participation ● Notes/Portfolios ● Homework ● Question & Answer ● Quizzes ● Tests ● Think-Pair-Share ● Whiteboards ● At the bell activities ● Constructed Response Tasks ● CDTs ● PSSAs

EVERGREEN COMMUNITY CHARTER SCHOOL CURRICULUM

MATH

Course: Math
Grade: 6

Make sense of problems and persevere in solving them. Reason abstractly and quantitatively.
Construct viable arguments and critique the reasoning of others. Model with mathematics.
Use appropriate tools strategically. Attend to precision.
Look for and express regularity in repeated reasoning. Look for and make use of structure.

PSSA Eligible Content	Materials/Unit	Methods/Assessment
• M06.A-R.1.1.1 Use ratio language and notation (such as 3 to 4, 3:4, 3/4) to describe a ratio relationship between two quantities. • M06.A-R.1.1.2 Find the unit rate a/b associated with a ratio a:b (with b ≠ 0) and use rate language in the context of a ratio relationship. • M06.A-R.1.1.3 Construct tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and/or plot the pairs of values on the coordinate plane. Use tables to compare ratios. • M06.A-R.1.1.4 Solve unit rate problems including those involving unit pricing and constant speed. • M06.A-R.1.1.5 Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percentage. • 6.RP.A.1. Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. • 6.RP.A.2. Understand the concept of a unit rate a/b associated with a ratio a:b with b ≠ 0, and use rate language in the context of a ratio relationship. • 6.RP.A.3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. • 6.RP.A.3a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. • 6.RP.A.3b. Solve unit rate problems including those involving unit pricing and constant speed.	**Materials:** Illustrative Mathematics: McGraw-Hill and supplementary workbooks Pdesas.org **Unit 2 – Introducing Ratios**	**Methods:** ● Lecture ● Demonstration ● Note-taking ● Discussion ● Practice ● Problem-based Instruction ● Hands-on exploration ● Small Group activities **Assessment:** ● Observation ● Participation ● Notes/Portfolios ● Homework ● Question & Answer ● Quizzes ● Tests ● Think-Pair-Share ● Whiteboards ● At the bell activities ● Constructed Response Tasks ● CDTs ● PSSAs

EVERGREEN COMMUNITY CHARTER SCHOOL CURRICULUM

MATH

Course: Math
Grade: 6

Make sense of problems and persevere in solving them. Reason abstractly and quantitatively.
Construct viable arguments and critique the reasoning of others. Model with mathematics.
Use appropriate tools strategically. Attend to precision.
Look for and express regularity in repeated reasoning. Look for and make use of structure.

PSSA Eligible Content	Materials/Unit	Methods/Assessment
• M06.A-R.1.1.1 Use ratio language and notation (such as 3 to 4, 3:4, 3/4) to describe a ratio relationship between two quantities. • M06.A-R.1.1.2 Find the unit rate a/b associated with a ratio a:b (with $b \neq 0$) and use rate language in the context of a ratio relationship. • M06.A-R.1.1.3 Construct tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and/or plot the pairs of values on the coordinate plane. Use tables to compare ratios. • M06.A-R.1.1.4 Solve unit rate problems including those involving unit pricing and constant speed. • M06.A-R.1.1.5 Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percentage. • 6.RP.A.2. Understand the concept of a unit rate a/b associated with a ratio a:b with $b \neq 0$, and use rate language in the context of a ratio relationship. • 6.RP.A.3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. • 6.RP.A.3b. Solve unit rate problems including those involving unit pricing and constant speed. • 6.RP.A.3c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent. • 6.RP.A.3d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	**Materials:** Illustrative Mathematics: McGraw-Hill and supplementary workbooks Pdesas.org **Unit 3 – Unit Rates and Percentages**	**Methods:** ● Lecture ● Demonstration ● Note-taking ● Discussion ● Practice ● Problem-based Instruction ● Hands-on exploration ● Small Group activities **Assessment:** ● Observation ● Participation ● Notes/Portfolios ● Homework ● Question & Answer ● Quizzes ● Tests ● Think-Pair-Share ● Whiteboards ● At the bell activities ● Constructed Response Tasks ● CDTs ● PSSAs

EVERGREEN COMMUNITY CHARTER SCHOOL CURRICULUM

MATH

Course: Math
Grade: 6

Make sense of problems and persevere in solving them. Reason abstractly and quantitatively.
Construct viable arguments and critique the reasoning of others. Model with mathematics.
Use appropriate tools strategically. Attend to precision.
Look for and express regularity in repeated reasoning. Look for and make use of structure.

PSSA Eligible Content	Materials/Unit	Methods/Assessment
• M06.A-N.1.1.1 Interpret and compute quotients of fractions (including mixed numbers), and solve word problems involving division of fractions by fractions. • M06.C-G.1.1.1 Determine the area of triangles and special quadrilaterals (i.e., square, rectangle, parallelogram, rhombus, and trapezoid). Formulas will be provided. • M06.C-G.1.1.2 Determine the area of irregular or compound polygons. • M06.C-G.1.1.3 Determine the volume of right rectangular prisms with fractional edge lengths. Formulas will be provided. • M06.C-G.1.1.4 Given coordinates for the vertices of a polygon in the plane, use the coordinates to find side lengths and area of the polygon (limited to triangles and special quadrilaterals). Formulas will be provided. • M06.C-G.1.1.5 Represent three-dimensional figures using nets made of rectangles and triangles. • M06.C-G.1.1.6 Determine the surface area of triangular and rectangular prisms (including cubes). Formulas will be provided. • 6.NS.A.1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. • 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. • 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	**Materials:** Illustrative Mathematics: McGraw-Hill and supplementary workbooks Pdesas.org **Unit 4 – Dividing Fractions**	**Methods:** ● Lecture ● Demonstration ● Note-taking ● Discussion ● Practice ● Problem-based Instruction ● Hands-on exploration ● Small Group activities **Assessment:** ● Observation ● Participation ● Notes/Portfolios ● Homework ● Question & Answer ● Quizzes ● Tests ● Think-Pair-Share ● Whiteboards ● At the bell activities ● Constructed Response Tasks ● CDTs ● PSSAs

Course: Math **Grade: 6**	Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.
	Construct viable arguments and critique the reasoning of others.	Model with mathematics.
	Use appropriate tools strategically.	Attend to precision.
	Look for and express regularity in repeated reasoning.	Look for and make use of structure.

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 = l w h and V = b h to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.		

EVERGREEN COMMUNITY CHARTER SCHOOL CURRICULUM

MATH

Course: Math
Grade: 6

Make sense of problems and persevere in solving them. Reason abstractly and quantitatively.
Construct viable arguments and critique the reasoning of others. Model with mathematics.
Use appropriate tools strategically. Attend to precision.
Look for and express regularity in repeated reasoning. Look for and make use of structure.

PSSA Eligible Content	Materials/Unit	Methods/Assessment
• M06.A-N.2.1.1 Solve problems involving operations (+, –, ×, and ÷) with whole numbers, decimals (through thousandths), straight computation, or word problems. • M06.B-E.1.1.1 Write and evaluate numerical expressions involving whole-number exponents. • M06.B-E.1.1.2 Write algebraic expressions from verbal descriptions. • M06.B-E.1.1.3 Identify parts of an expression using mathematical terms (e.g., sum, term, product, factor, quotient, coefficient, quantity). • M06.B-E.1.1.4 Evaluate expressions at specific values of their variables, including expressions that arise from formulas used in real-world problems. • M06.B-E.1.1.5 Apply the properties of operations to generate equivalent expressions. • M06.B-E.2.1.1 Use substitution to determine whether a given number in a specified set makes an equation or inequality true. • M06.B-E.2.1.2 Write algebraic expressions to represent real-world or mathematical problems. • M06.B-E.2.1.3 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q, and x are all non-negative rational numbers. • M06.B-E.2.1.4 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem and/or represent solutions of such inequalities on number lines. • 6.NS.B.2. Fluently divide multi-digit numbers using the standard algorithm. • 6.NS.B.3. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. • 6.EE.A.4. Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them)	**Materials:** Illustrative Mathematics: McGraw-Hill and supplementary workbooks Pdesas.org **Unit 5 – Arithmetic in Base Ten**	**Methods:** • Lecture • Demonstration • Note-taking • Discussion • Practice • Problem-based Instruction • Hands-on exploration • Small Group activities **Assessment:** • Observation • Participation • Notes/Portfolios • Homework • Question & Answer • Quizzes • Tests • Think-Pair-Share • Whiteboards • At the bell activities • Constructed Response Tasks • CDTs • PSSAs

EVERGREEN COMMUNITY CHARTER SCHOOL CURRICULUM

MATH

Course: Math
Grade: 6

Make sense of problems and persevere in solving them. Reason abstractly and quantitatively.
Construct viable arguments and critique the reasoning of others. Model with mathematics.
Use appropriate tools strategically. Attend to precision.
Look for and express regularity in repeated reasoning. Look for and make use of structure.

PSSA Eligible Content	Materials/Unit	Methods/Assessment
• M06.A-N.2.1.1 Solve problems involving operations (+, –, ×, and ÷) with whole numbers, decimals (through thousandths), straight computation, or word problems. • M06.A-R.1.1.1 Use ratio language and notation (such as 3 to 4, 3:4, 3/4) to describe a ratio relationship between two quantities. • M06.A-R.1.1.2 Find the unit rate a/b associated with a ratio a:b (with $b \neq 0$) and use rate language in the context of a ratio relationship. • M06.A-R.1.1.3 Construct tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and/or plot the pairs of values on the coordinate plane. Use tables to compare ratios. • M06.A-R.1.1.4 Solve unit rate problems including those involving unit pricing and constant speed. • M06.A-R.1.1.5 Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percentage. • M06.B-E.1.1.1 Write and evaluate numerical expressions involving whole-number exponents. • M06.B-E.1.1.2 Write algebraic expressions from verbal descriptions. • M06.B-E.1.1.3 Identify parts of an expression using mathematical terms (e.g., sum, term, product, factor, quotient, coefficient, quantity). • M06.B-E.1.1.4 Evaluate expressions at specific values of their variables, including expressions that arise from formulas used in real-world problems. • M06.B-E.1.1.5 Apply the properties of operations to generate equivalent expressions. • M06.B-E.2.1.1 Use substitution to	**Materials:** Illustrative Mathematics: McGraw-Hill and supplementary workbooks Pdesas.org **Unit 6 – Expressions and Equations**	**Methods:** ● Lecture ● Demonstration ● Note-taking ● Discussion ● Practice ● Problem-based Instruction ● Hands-on exploration ● Small Group activities **Assessment:** ● Observation ● Participation ● Notes/Portfolios ● Homework ● Question & Answer ● Quizzes ● Tests ● Think-Pair-Share ● Whiteboards ● At the bell activities ● Constructed Response Tasks ● CDTs ● PSSAs

Course: Math **Grade: 6**	Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.
	Construct viable arguments and critique the reasoning of others.	Model with mathematics.
	Use appropriate tools strategically.	Attend to precision.
	Look for and express regularity in repeated reasoning.	Look for and make use of structure.

determine whether a given number in a specified set makes an equation or inequality true. • M06.B-E.2.1.2 Write algebraic expressions to represent real-world or mathematical problems. • M06.B-E.2.1.3 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q, and x are all non-negative rational numbers. • M06.B-E.2.1.4 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem and/or represent solutions of such inequalities on number lines. • M06.B-E.3.1.1 Write an equation to express the relationship between the dependent and independent variables. • M06.B-E.3.1.2 Analyze the relationship between the dependent and independent variables using graphs and tables and/or relate these to an equation.		

EVERGREEN COMMUNITY CHARTER SCHOOL CURRICULUM

MATH

Course: Math
Grade: 6

Make sense of problems and persevere in solving them. Reason abstractly and quantitatively.
Construct viable arguments and critique the reasoning of others. Model with mathematics.
Use appropriate tools strategically. Attend to precision.
Look for and express regularity in repeated reasoning. Look for and make use of structure.

PSSA Eligible Content	Materials/Unit	Methods/Assessment
• M06.A-N.2.1.1 Solve problems involving operations (+, –, ×, and ÷) with whole numbers, decimals (through thousandths), straight computation, or word problems. • M06.A-N.2.2.1 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. • M06.A-N.2.2.2 Apply the distributive property to express a sum of two whole numbers, 1 through 100, with a common factor as a multiple of a sum of two whole numbers with no common factor. • M06.A-N.3.1.1 Represent quantities in real-world contexts using positive and negative numbers, explaining the meaning of 0 in each situation (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge). • M06.A-N.3.1.2 Determine the opposite of a number and recognize that the opposite of the opposite of a number is the number itself (e.g., –(–3) = 3; 0 is its own opposite). • M06.A-N.3.1.3 Locate and plot integers and other rational numbers on a horizontal or vertical number line; locate and plot pairs of integers and other rational numbers on a coordinate plane. • M06.A-N.3.2.1 Write, interpret, and explain statements of order for rational numbers in real-world contexts. • M06.A-N.3.2.2 Interpret the absolute value of a rational number as its distance from 0 on the number line and as a magnitude for a positive or negative quantity in a real-world situation. • M06.A-N.3.2.3 Solve real-world and mathematical problems by plotting points in all four quadrants of the	**Materials:** Illustrative Mathematics: McGraw-Hill and supplementary workbooks Pdesas.org **Unit 7 - Rational Numbers**	**Methods:** ● Lecture ● Demonstration ● Note-taking ● Discussion ● Practice ● Problem-based Instruction ● Hands-on exploration ● Small Group activities **Assessment:** ● Observation ● Participation ● Notes/Portfolios ● Homework ● Question & Answer ● Quizzes ● Tests ● Think-Pair-Share ● Whiteboards ● At the bell activities ● Constructed Response Tasks ● CDTs ● PSSAs

Course: Math **Grade: 6**	Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.
	Construct viable arguments and critique the reasoning of others.	Model with mathematics.
	Use appropriate tools strategically.	Attend to precision.
	Look for and express regularity in repeated reasoning.	Look for and make use of structure.

coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. • M06.B-E.2.1.1 Use substitution to determine whether a given number in a specified set makes an equation or inequality true. • M06.B-E.2.1.2 Write algebraic expressions to represent real-world or mathematical problems. • M06.B-E.2.1.3 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q, and x are all non-negative rational numbers. • M06.B-E.2.1.4 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem and/or represent solutions of such inequalities on number lines. • M06.C-G.1.1.4 Given coordinates for the vertices of a polygon in the plane, use the coordinates to find side lengths and area of the polygon (limited to triangles and special quadrilaterals). Formulas will be provided. • 6.NS.B.4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. • 6.NS.C.5. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.		

EVERGREEN COMMUNITY CHARTER SCHOOL CURRICULUM

MATH

Course: Math **Grade: 6**	Make sense of problems and persevere in solving them. Construct viable arguments and critique the reasoning of others. Use appropriate tools strategically. Look for and express regularity in repeated reasoning.	Reason abstractly and quantitatively. Model with mathematics. Attend to precision. Look for and make use of structure.

• 6.NS.C.6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. • 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. • 6.NS.C.6b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. • 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. • 6.NS.C.7. Understand ordering and absolute value of rational numbers. • 6.NS.C.7a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. • 6.NS.C.7b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. • 6.NS.C.7c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. • 6.NS.C.7d. Distinguish comparisons of absolute value from statements about order. • 6.NS.C.8. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of		

Course: Math **Grade: 6**	Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.
	Construct viable arguments and critique the reasoning of others.	Model with mathematics.
	Use appropriate tools strategically.	Attend to precision.
	Look for and express regularity in repeated reasoning.	Look for and make use of structure.

coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. • 6.EE.A.2b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. • 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. • 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. • 6.EE.B.8. Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams. • 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.		

EVERGREEN COMMUNITY CHARTER SCHOOL CURRICULUM

MATH

Course: Math
Grade: 6

Make sense of problems and persevere in solving them. Reason abstractly and quantitatively.
Construct viable arguments and critique the reasoning of others. Model with mathematics.
Use appropriate tools strategically. Attend to precision.
Look for and express regularity in repeated reasoning. Look for and make use of structure.

PSSA Eligible Content	Materials/Unit	Methods/Assessment
• M06.D-S.1.1.1 Display numerical data in plots on a number line, including line plots, histograms, and box-and-whisker plots. • M06.D-S.1.1.2 Determine quantitative measures of center (e.g., median, mean, mode) and variability (e.g., range, interquartile range, mean absolute deviation). • M06.D-S.1.1.3 Describe any overall pattern and any deviations from the overall pattern with reference to the context in which the data were gathered. • M06.D-S.1.1.4 Relate the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. • 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. • 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. • 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. • 6.SP.B.4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots. • 6.SP.B.5a. Summarize numerical data sets in relation to their context, such as by reporting the number of observations. • 6.SP.B.5b. Summarize numerical data sets in relation to their context, such as by describing the nature of the attribute under investigation, including how it was measured and its units of measurement.	**Materials:** Illustrative Mathematics: McGraw-Hill and supplementary workbooks Pdesas.org **Unit 8 – Datasets and Distributions**	**Methods:** ● Lecture ● Demonstration ● Note-taking ● Discussion ● Practice ● Problem-based Instruction ● Hands-on exploration ● Small Group activities **Assessment:** ● Observation ● Participation ● Notes/Portfolios ● Homework ● Question & Answer ● Quizzes ● Tests ● Think-Pair-Share ● Whiteboards ● At the bell activities ● Constructed Response Tasks ● CDTs ● PSSAs

Course: Math **Grade: 6**	Make sense of problems and persevere in solving them. Construct viable arguments and critique the reasoning of others. Use appropriate tools strategically. Look for and express regularity in repeated reasoning.	Reason abstractly and quantitatively. Model with mathematics. Attend to precision. Look for and make use of structure.

• 6.SP.B.5c. Summarize numerical data sets in relation to their context, such as by 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. • 6.SP.B.5d. Summarize numerical data sets in relation to their context, such as by 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.		