## Sixth Grade Mathematics

Curriculum Guide
Dunmore School District
Dunmore, PA


# Dunmore School District 

Curriculum Guide

## Sixth Grade Mathematics

## Prerequisite:

- Satisfactory completion of fifth grade


## Course Description:

In the Sixth Grade Mathematics course students extend their work with fraction operations to dividing fractions and mixed numbers. Student develop fluency with whole-number division and decimal operations (addition, subtraction, multiplication, division) using the standard algorithms. They learn about negative integers and negative rational numbers and locate these on the number line. They also learn absolute value, and they plot points in all four quadrants of the coordinate plane.

## Special Education:

After a student has been evaluated and found to be eligible for specially designed instruction under one of the 13 disability categories, an individualized education plan will be developed to help the student succeed through a more intense intervention program. Special Education is the practice of educating students in a way that addresses their individual differences and needs. The purpose of special education is to provide equal access to education for children ages birth through 21 by providing specialized services that will lead to school success in general education. Our goal for each student is for him/her to be educated in his/her least restrictive environment with additional supports by way of specially designed instruction. After all interventions in the general education setting have been exhausted and the student is still not making progress, students can receive direct instruction in a special education classroom. Direct instruction provides more intense intervention and replacement instruction in order to minimize skill deficits. In our special education classrooms, students will have access to the standards-based general education curriculum, as well as using various research-based intervention programs. Resources and activities will be adjusted based on individual student needs. Suggested time found within the curriculum will be adjusted as needed per individual student's needs.

Special Education Strategies can be located in the IEP Enhancements table located in Appendix: A at the end of this document.

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Year-at-a-glance

| Subject: Sixth Grade Math | Grade Level: 6 | Date Completed: 3/5/2019 |
| :---: | :---: | :---: |
| $1{ }^{\text {st }}$ Quarter |  |  |
| Achieving Fluency: Adding, Subtracting, and Multiplying Decimals | Envision Math Common Core Topic 4 | CC.2.1.6.E.2, M06.A-N.2.1.1 CC.2.2.6.B.1, M06.A.-N.2.1 |
| Achieving Fluency: Dividing Whole Numbers and Decimals | Envision Math Common Core Topic 5 | CC.2.1.6.E.2 M06.A.-N.2.1 CC.2.2.6.B.1 M06.A.N.2.1.1 |
| Dividing Fractions | Envision Math Common Core Topic 6 | $\begin{aligned} & \text { CC.2.1.6.E.1, CC.2.1.6.E. } 3 \\ & \text { CC.2.2.6.B.1, M06.A-N.1.1 } \\ & \text { M06.A-N.1.1.1 } \end{aligned}$ |
| Variables and Expressions | Envision Math Common Core Topic 1 | CC.2.2.6.B.1, M06.B-E.2.1 CC.2.2.6.B.2, M06.B-E.2.1.1 M06.B-E.2.1.2, M06.B-E.2.1.3 M06.B-E.2.1.4 |

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| $2^{\text {nd }}$ Quarter |  |  |
| :---: | :---: | :---: |
| Topic | Resources | Standards |
| Equations and Inequalities | Envision Math Common Core Topic 2 | $\begin{aligned} & \hline \text { CC.2.2.6.B.1, CC.2.2.6.B.2 } \\ & \text { M06.B-E.2.1, M06.B-E.2.1.1 } \\ & \text { M06.B-E.2.1.2, M06.B-E.2.1.3 } \\ & \text { M06.B-E.2.1.4 } \end{aligned}$ |
| Patterns and Equations | Envision Math Common Core Topic 3 | CC.2.2.6.B.3, M06.B-E.3.1 CC.2.2.6.B.1, M06.B-E.3.1.1 M06.B.E.3.1.2 |
| Integers and Rational Numbers | Envision Math Common Core Topic 7 | CC.2.1.6.E.4, M06.A-N.3.2 M06.A-N.3.2.1, M06.A-N.3.2.2 M06.A-N.3.2.3 |
| Coordinate Geometry | Envision Math Common Core Topic 8 | CC.2.1.6.E.4, M06.A-N.3.2 M06.A-N.3.2.1, M06.A-N.3.2.2 M06.A-N.3.2.3 |


| Topic | Resources | Standards |
| :---: | :---: | :---: |
| Ratios | Envision Math Common Core Topic 9 | CC.2.1.6.D.1, M06.A-R.1.1 M06.A-R.1.1.1, M06. A-R.1.1.2 M06. A-R.1.1.3, M06.A-R.1.1.4 M06.A-R.1.1.5 |
| Rates | Envision Math Common Core Topic 10 | $\begin{aligned} & \text { CC.2.1.6.D.1, M06.A-R.1.1 } \\ & \text { M06.A-R.1.1.1, M06.A.R.1.1.2 } \\ & \text { M06.A.-R.1.1.3, M06.A-R.1.1.4 } \\ & \text { M06. A-R.1.1.5 } \end{aligned}$ |
| Percents | Envision Math Common Core Topic 11 | CC.2.1.6.D.1, M06.A-R.1.1 M06.A-R.1.1.1, M06. A-R.1.1.2 M06.A-R.1.1.3, M06. A-R. 1.1.4 M06. A.1.1.5 |
| Area | Envision Math Common Core Topic 12 | CC.2.3.6.A.1, M06.C-G. 1.1 <br> M06.C-G.1.1.1, M06C-G.1.1.2 <br> M06.C-G. 1.1.3, M06C-G. 1.1.4 <br> M06.C-G.1.1.5, M06.C-G.1.1.6 |

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| 4 ${ }^{\text {th }}$ Quarter |
| :--- |
| Topic Resources Standards <br> Surface Area and Volume Envision Math Common Core  <br>  Topic 13 CC.2.3.6.A.1, M06.C-G.1.1 M06.C- <br> G.1.1.1, M06.C-G.1.1.2 <br> M06.C-G.1.1.3, M06.C.G.1.1.4 <br> M06.C.G.1.1.5, M06.C.G.1.1.6 <br> Statistics  Envision Math Common Core <br> Topic 14 <br> Review  CC.2.4.6.B.1, M06.D-S.1.1 M06.D- <br> S.1.1.1, M06.D-S.1.1.2 <br> M06.D-S.1.1.3, M06.D-S.1.1.4 <br> Step up to $7^{\text {th }}$ Grade Envision Math Common Core  |


| General Topic | Anchor Descriptor <br> PA Core Standards | Eligible Content, Essential Knowledge, Skills \& Vocabulary | Resources \& Activities | Assessments | ```Suggested Time (In Days)``` |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Achieving Fluency: <br> Adding, Subtracting, and Multiplying Decimals | M06.A-N.2.1 <br> Compute with multi-digit numbers using the four arithmetic operations with or without a calculator. <br> CC.2.1.6.E. 2 <br> Identify and choose appropriate processes to compute fluently with multi-digit numbers. | M06.A-N.2.1.1 <br> Solve problems involving operations (,+- , $x$, and $\div$ ) with whole numbers, decimals (through thousandths), straight computation, or word problems. <br> Vocabulary <br> - estimation <br> - expressions <br> - equations <br> - sum <br> - difference <br> - products <br> - quotients | Envision Math Common Core Topic 4 <br> Estimating Sums and Differences (4-1) <br> Evaluating Addition and Subtraction Expressions(42) <br> Solving Addition and Subtraction Equations (43) <br> Estimating Products (4-4) <br> Multiplying Decimals (4-5) <br> Workbook <br> Worksheets <br> www.pearsonrealize.com Promethium Board | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |
| Achieving Fluency: <br> Dividing Whole <br> Numbers and Decimals | M06.A-N.2.1 <br> Compute with multi-digit numbers using the four arithmetic operations with or without a calculator. <br> CC.2.1.6.E. | M06.A-N.2.1.1 <br> Solve problems involving operations (,$+-\times$, and $\div$ ) with whole numbers, decimals (through thousandths), straight computation, or word | Envision Math Common Core Topic 5 <br> Estimating Quotients: 2digit divisors(5-1) Dividing Whole Numbers: 2-digit Divisors (5-2) | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |

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|  | Identify and choose appropriate processes to compute fluently with multi-digit numbers. | problems. <br> Vocabulary <br> - dividend <br> - divisor <br> - quotient <br> - decimal | More Dividing Whole Numbers (5-3) <br> Dividing Decimals by a Whole Number (5-4) <br> Dividing Decimals(5-5) <br> Evaluating Expressions with Decimals (5-6) <br> Solving Equations (5-7) Workbook <br> Worksheets <br> www.pearsonrealize.com Promethium Board |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Variables and Expressions | M06.B-E.2.1 Create, solve, and interpret one variable equations or inequalities in realworld and mathematical problems. <br> 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. | M06.B-E.2.1.1 Use substitution to determine whether a given number in a specified set makes an equation or inequality true. <br> M06.B-E.2.1.2 Write algebraic expressions to represent realworld or mathematical problems. <br> M06.B-E.2.1.3 Solve real-world and mathematical problems by writing and solving equations of the form $x+p=q$ | Envision Math Common <br> Core Topic 1 <br> Order of Operations (1-3) <br> Evaluating Numerical <br> Expressions (1-5) <br> Evaluating Algebraic <br> Expressions (1-8) <br> Simplifying Algebraic <br> Expressions (1-10) <br> Workbook <br> Worksheets | Teacher prepared tests, quizzes, etc. Assessments online. Series Available (Optional) | 10 days |

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|  |  | and $p x=q$ for cases in which $p$, $q$, and $x$ are all non-negative rational numbers. <br> 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. <br> Vocabulary <br> - algebraic expression <br> - expanded form <br> - variable <br> - compatible <br> - exponent <br> - commutative property <br> - associative property <br> - identity property <br> - distributive property <br> - simplifying | www.pearsonrealize.com Promethium Board |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Equations and Inequalities | M06.B-E.2.1 Create, solve, and interpret one variable equations or inequalities in realworld and mathematical problems. | M06.B-E.2.1.1 Use substitution to determine whether a given number in a specified set makes an equation or inequality true. | Envision Math Common Core Topic 2 <br> Understanding Equations (2-1) | Teacher prepared tests, quizzes, etc. Assessments online. Series Available (Optional) | 10 days |

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|  | 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. <br> M06.B-E.3.1 Use variables to represent two quantities in a real-world problem that change in relationship to one another. <br> CC.2.2.6.B. 3 <br> Represent and analyze quantitative relationships between dependent and independent variables. | M06.B-E.2.1.2 Write algebraic expressions to represent realworld or mathematical problems. <br> M06.B-E.2.1.3 Solve real-world and mathematical problems by writing and solving equations of the form $x+p=q$ and $p x=q$ for cases in which $p$, $q$, and $x$ are all non-negative rational numbers. <br> 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. <br> Vocabulary <br> - inequality <br> - properties of equality <br> - writing inequalities <br> - Solving Inequalities | Solving Addition and Subtraction Equations (22) <br> Solving Multiplication and Division Equations (2-5) <br> Workbook <br> Worksheets <br> www.pearsonrealize.com Promethium Board |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dividing Fractions | M06.A-N.1.1 Solve real-world and mathematical problems involving division of fractions. <br> CC.2.1.6.E.1 <br> Apply and extend previous | 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. Example 1: Given a story context for $(2 / 3) \div(3 / 4)$, | Envision Math Common Core Topic 6 <br> Greatest Common Factor(6- <br> 1) <br> Least Common Multiple(6-2) | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |

[^0]|  | understandings of multiplication and division to divide fractions by fractions. | explain that $(2 / 3) \div(3 / 4)=8 / 9$ because $3 / 4$ of $8 / 9$ is 2/3. (In general, $(a / b) \div(c / d)=$ (a/b) $\times(d / c)=a d / b c$.) <br> Example 2: How wide is a rectangular strip of land with length $3 / 4 \mathrm{mi}$ and area $1 / 2$ square mi? <br> Example 3: How many 2 1/4-foot pieces can be cut from a 15 1/2-foot board? <br> Review: Adding, Subtracting, \& Multiplying Fractions <br> Vocabulary <br> - greatest common factor <br> - least common multiple <br> - reciprocal <br> - mixed numbers <br> - improper fractions | Dividing Whole Numbers by Fractions (6-4) <br> Modeling Division of Fractions (6-3 \& 6-5) <br> More Dividing Fractions (66) <br> Estimating Mixed Numbers Quotients (6-7) <br> Dividing Mixed Numbers (68) <br> Evaluating Expressions with Fractions (6-9) <br> Solving Equations with Fractions (6-10) <br> Workbook <br> Worksheets |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Integers and Other Rational Numbers | M06.A-N.3.2 Understand ordering and absolute value of rational numbers. <br> CC.2.1.6.E. 4 <br> Apply and extend previous understandings of numbers to | M06.A-N.3.2.1 Write, interpret, and explain statements of order for rational numbers in real-world contexts. <br> Example: Write $-3^{\circ} \mathrm{C}>-7^{\circ} \mathrm{C}$ to express the fact that | Envision Math Common Core Topic 7 <br> Understanding Integers(7- <br> 1) <br> Comparing and Ordering Integers(7-2) | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |

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[^1]|  |  | - absolute value <br> - rational number <br> - comparing <br> - ordering |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Coordinate Geometry | M06.A-N.3.2 Understand ordering and absolute value of rational numbers. <br> CC.2.1.6.E.4 <br> Apply and extend previous understandings of numbers to the system of rational numbers. | M06.A-N.3.2.1 Write, interpret, and explain statements of order for rational numbers in real-world contexts. <br> Example: Write $-3^{\circ} \mathrm{C}>-7^{\circ} \mathrm{C}$ to express the fact that $-3^{\circ} \mathrm{C}$ is warmer than $-7^{\circ} \mathrm{C}$. <br> 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. <br> Example: For an account balance of - $\mathbf{3 0}$ dollars, write \|-30| = 30 to describe the size of the debt in dollars, and recognize that an account balance less than - $\mathbf{3 0}$ dollars represents a debt greater than $\mathbf{3 0}$ dollars. | Envision Math Common Core Topic 8 <br> Integers in a Coordinate Plane (8-1) <br> Rational Numbers on a Coordinate Plane (8-2) <br> Distance on the Coordinate Plane (8-3) <br> Polygons on the Coordinate Plane (8-4) <br> Graphing Equations (8-5) <br> More Graphing Equations (8-6) <br> Workbook <br> Worksheets <br> www.pearsonrealize.com Promethium Board | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |

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|  |  | M06.A-N.3.2.3 Solve real-world and mathematical problems by plotting points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. <br> Vocabulary <br> - coordinate plane <br> - quadrant <br> - distance <br> - polygons <br> - linear equation |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ratios | M06.A-R.1.1 Represent and/or solve real-world and Mathematical problems using rates, ratios, and/or percents. <br> CC.2.1.6.D. 1 <br> Understand ratio concepts and use ratio reasoning to solve 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. <br> Example 1: "The ratio of girls to boys in a math class is 2:3 because for every 2 girls there are 3 boys." <br> Example 2: "For every five votes candidate A received, candidate $B$ received | Envision Math Common Core Topic 9 <br> Understanding Ratios (9-1) <br> Equivalent Ratios (9-2) <br> Modeling Ratios (9-3) <br> Using Ratio (9-4) <br> Ratios and Graphs (9-5) <br> Workbook <br> Worksheets | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |

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[^3]|  |  | could be mowed in 35 hours? At what rate were lawns being mowed? At that rate, how many lawns? <br> 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. <br> Vocabulary <br> - ratio <br> - equivalent <br> - divisible |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rates | M06.A-R.1.1 Represent and/or solve real-world and mathematical problems using rates, ratios, and/or percents. <br> CC.2.1.6.D. 1 <br> Understand ratio concepts and use ratio reasoning to solve 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. <br> Example 1: "The ratio of girls to boys in a math class is 2:3 because for every 2 girls there are 3 boys." <br> Example 2: "For every five votes candidate A received, candidate | Envision Math Common Core Topic 10 <br> Understanding Rates (101) <br> Comparing Rates (10-2) <br> Unit Rates (10-3) <br> Unit Price (10-4) <br> Workbook | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |

[^4]|  |  | B received four votes." <br> 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. <br> Example 1: "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3 / 4$ cup of flour for each cup of sugar." <br> Example 2: "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger." <br> 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. <br> Example: If it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in | Worksheets www.pearsonrealize.com Promethium Board |  |
| :---: | :---: | :---: | :---: | :---: |

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|  |  | 35 hours? At what rate were lawns being mowed? 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. <br> Vocabulary <br> - rate <br> - unit rates <br> - unit price <br> - distance formula <br> - Customary Units |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent | M06.A-R.1.1 Represent and/or solve real-world and mathematical problems using rates, ratios, and/or percents. <br> CC.2.1.6.D. 1 <br> Understand ratio concepts and use ratio reasoning to solve 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. <br> Example 1: "The ratio of girls to boys in a math class is 2:3 because for every $\mathbf{2}$ girls there are 3 boys." <br> Example 2: "For every five votes candidate A received, candidate B received four votes." | Envision Math Common Core Topic 11 <br> Understanding Percent (11-1) <br> Fractions, Decimals, and Percents (11-2) <br> Percent > 100 or < 1 (11-3) <br> Finding a Percent of a <br> Number (11-5) | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |

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|  |  | 35 hours? At what rate were lawns being mowed? 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. <br> Vocabulary <br> - percent <br> - ratio <br> - proportion <br> - fraction <br> - decimal |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Statistics | M06.D-S.1.1 Display, analyze, and summarize numerical data sets in relation to their context. | M06.D-S.1.1.1 Display numerical data in plots on a number line, including line plots, histograms, and box-and-whisker plots. <br> 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). <br> M06.D-S.1.1.3 Describe any overall pattern and any deviations from the overall pattern with reference to the context in | Envision Math Common <br> Core Topic 14 <br> Mean (14-3) <br> Median, Mode, and Range (14-4) <br> Frequency Tables and Histograms (14-5) <br> Box Plots (14-6) <br> Workbook <br> Worksheets <br> www.pearsonrealize.com Promethium Board | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |

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|  |  | which the data were gathered. <br> 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. <br> Vocabulary <br> - histogram <br> - median <br> - mode box plot <br> - quartiles <br> - interval <br> - data <br> - ratio <br> - percent <br> - mean <br> - range <br> - frequency table <br> - interquartile range <br> - mean absolute deviation |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Area | M06.C-G.1.1 Find area, surface area, and volume by applying formulas and using various strategies. <br> CC.2.3.6.A. 1 <br> Apply appropriate tools to solve | 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 | Envision Math Common Core Topic 12 <br> Area of Rectangles (12-1) <br> Area of Parallelograms and Rhombuses(12-2) | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |

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|  |  | Vocabulary <br> - area <br> - polygon <br> - parallelogram <br> - perpendicular <br> - rectangle <br> - rhombus <br> - triangle <br> - quadrilaterals |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Surface Area and Volume | M06.C-G.1.1 Find area, surface area, and volume by applying formulas and using various strategies. <br> CC.2.3.6.A. 1 <br> Apply appropriate tools to solve real-world and mathematical problems involving area, surface area, and volume. | 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. <br> M06.C-G.1.1.2 Determine the area of irregular or compound polygons. <br> Example: Find the area of a room in the shape of an irregular polygon by composing and/or decomposing. M06.C-G.1.1.3 Determine the volume of right rectangular prisms with fractional edge lengths. Formulas will be provided. | Envision Math Common Core Topic 13 <br> Solid Figures and Nets (13- <br> 1) <br> Surface Area of Prisms and Pyramids (13-2) <br> Workbook <br> Worksheets <br> www.pearsonrealize.com Promethium Board | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |

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|  |  | 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. <br> G.1.1.5 Represent threedimensional figures using nets made of rectangles and triangles. <br> M06.C-G.1.1.6 Determine the surface area of triangular and rectangular prisms (including cubes). Formulas will be provided. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Patterns and Equations | CC.2.2.6.B. 3 <br> Represent and analyze quantitative relationships between dependent and independent variables. | M06.B-E.3.1 Use variables to represent two quantities in a real-world problem that change in relationship to one another. <br> M06.B-E.3.1.1 Write an equation to express the relationship between the dependent and independent variables. <br> Example: In a problem involving motion at a constant speed of 65 units, write the equation $d=65 t$ | Dependent and Independent Variables (3- <br> 1) <br> Patterns and Equations (3- <br> 2) <br> More Patterns and Equations (3-3) <br> Workbook <br> Worksheets <br> www.pearsonrealize.com Promethium Board | Teacher prepared tests, quizzes, etc. <br> Series Available Assessments online.(Optional) | 10 days |

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## Dunmore School District

## Curriculum Guide

| Appendix: A |  |  |  |
| :---: | :---: | :---: | :---: |
| IEP Enhancements |  |  |  |
| General Topic: | Specially Designed Instruction: | Additional Vocabulary: | Assessments/Suggested Time: |
| Achieving Fluency: Adding, <br> Subtracting, and <br> Multiplying <br> Decimals | - Manipulatives <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Use of Calculator <br> - Times Tables Chart <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Use of graph paper <br> - Multi-Modality Instruction including modeling, explicit instruction, repetition rephrasing, visual cues and chunking of material <br> - Extended time to complete | - tenths <br> - hundredths <br> - thousandths | Assessments: <br> - Limit choices from 4 to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Paper <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |
| Achieving Fluency: Dividing Whole Numbers and Decimals | - Manipulatives <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Use of a Calculator <br> - Times Tables Chart <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Use of graph paper <br> - Multi-Modality Instruction including modeling, explicit instruction, repetition rephrasing, visual cues and chunking of material <br> - Extended time to complete | - tenths <br> - hundredths <br> - thousandths | Assessments: <br> - Limit choices from $\mathbf{4}$ to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Paper <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |

Sixth Grade Mathematics

| General Topic: | Specially Designed Instruction: | Additional Vocabulary: | Assessments/Suggested Time: |
| :---: | :---: | :---: | :---: |
| Variables and Expressions | - Manipulatives <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Times Tables Chart <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Extended time to complete | - operation key words <br> - sum <br> - difference <br> - product <br> - quotient | Assessments: <br> - Limit choices from 4 to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Paper <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |
| Equations and Inequalities | - Manipulatives <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Number Line <br> - Multi-Modality Instruction, including modeling, explicit instruction, repetition, rephrasing, visual cues and chunking of material Extended time to complete | - review greater than, less than and equal to | Assessments: <br> - Limit choices from 4 to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Paper <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |
| Dividing Fractions | - Manipulative <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Use of Calculator <br> - Times Tables Chart <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Multi-Modality Instruction, including modeling, explicit instruction, repetition, rephrasing, visual cues and chunking of material <br> - Extended time to complete |  | Assessments: <br> - Limit choices from 4 to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Papers <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |

Sixth Grade Mathematics

| General Topic: | Specially Designed Instruction: | Additional Vocabulary: | Assessments/Suggested Time: |
| :---: | :---: | :---: | :---: |
| Integers and Other Rational Numbers | - Manipulatives <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations/ Signs <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Multi-Modality Instruction, including modeling, explicit instruction, repetition, rephrasing, visual cues and chunking of material <br> - Extended time to complete |  | Assessments: <br> - Limit choices from 4 to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Paper <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |
| Coordinate Geometry | - Visual Aids <br> - Anchor Charts for visual presentations <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Signs/Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Multi-Modality Instruction, including modeling, explicit instruction, repetition, rephrasing, visual cues and chunking material <br> - Extended time to complete |  | Assessments: <br> - Limit choices from 4 to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |
| Ratios | - Manipulatives <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Use of Calculator <br> - Times Tables Chart <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Multi-Modality Instruction, including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material <br> - Extended time to complete | - percent <br> - operation key words | Assessments: <br> - Limit choices from 4 to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Paper <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |

Sixth Grade Mathematics

| General Topic: | Specially Designed Instruction: | Additional Vocabulary: | Assessments/Suggested Time: |
| :---: | :---: | :---: | :---: |
| Rates | - Manipulatives <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Use of Calculator <br> - Times Tables Chart <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Multi-Modality Instruction, including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material <br> - Extended time to complete | - equivalent | Assessments: <br> - Limit choices from 4 to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Paper <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |
| Percent | - Manipulatives <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Use of Calculator <br> - Times Tables Chart <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Multi-Modality Instruction, including modeling, explicit instruction, repetition, rephrasing, visual cues and chunking of material <br> - Extended time to complete | - rate <br> - unit rate | Assessments: <br> - Limit choices from 4 to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Paper <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |

Sixth Grade Mathematics

| General Topic: | Specially Designed Instruction: | Additional Vocabulary: | Assessments/Suggested Time: |
| :---: | :---: | :---: | :---: |
| Statistics | - Manipulatives <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Use of Calculator <br> - Times Tables Chart <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Multi-Modality Instruction, including modeling, explicit instruction, repetition, rephrasing, visual cues and chunking of material <br> - Extended time to complete |  | Assessments: <br> - Limit choices from 4 to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Paper <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |
| Area | - Manipulatives <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Use of Calculator <br> - Times Tables Chart <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Graph paper <br> - Multi-Modality Instruction, including modeling, explicit instruction, repetition, rephrasing, visual cues and chunking of material <br> - Extended time to complete |  | Assessments: <br> - Limit choices from 4 to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Paper <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |

Sixth Grade Mathematics

Dunmore School District
Curriculum Guide

| General <br> Topic: | Specially Designed Instruction: | Additional Vocabulary: | Assessments/Suggested Time: |
| :---: | :---: | :---: | :---: |
| Surface Area and Volume | - Manipulative <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Use of Calculator <br> - Times Tables Chart <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Multi-Modality Instruction, including modeling, explicit instruction, repetition, rephrasing, visual cues and chunking of material <br> - Extended time to complete |  | Assessments: <br> - Limit choices from 4 to 3 choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Papers <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |
| Patterns and Equations | - Manipulative <br> - Visual Aids <br> - Anchor Charts for visual presentations <br> - Use of Calculator <br> - Times Tables Chart <br> - Small group review before tests and quizzes <br> - Additional Work Space <br> - Highlight Operations <br> - Modified Assignments (examples but not limited to: less problems on page, reduction on questions/answers, larger print on typed worksheets) <br> - Multi-Modality Instruction, including modeling, explicit instruction, repetition, rephrasing, visual cues and chunking of material <br> - Extended time to complete | - variables <br> - rate <br> - evaluating <br> - expressions <br> - equation | Assessments: <br> - Limit choices from $\mathbf{4}$ to $\mathbf{3}$ choices (for a multiple choice test) <br> - Test in a small group setting <br> - Quiet Testing Environment <br> - Word Problems Read aloud <br> - Less Problems if needed <br> - Use of Scrap Papers <br> Suggested Time: <br> 10 days as specified by curriculum with additional time as needed per individual student |
| Review | As listed above |  |  |
| $\begin{aligned} & \text { Step up to } 7^{\text {th }} \\ & \text { Grade } \end{aligned}$ | As listed above |  |  |

Sixth Grade Mathematics


[^0]:    Sixth Grade Mathematics

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