Course: Math
Grade Level: 6th
Textbook/Instructional Materials: Glencoe Math (Course 1)

| Month | IB Unit/Topic | Assessments and Activities | Approaches to Learning | Curriculum Standards and IB Criterion and Strands |
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| **September -mid October** | Unit 1 Statistical Measures and Displays | Activities:<br>Interactive Student Notebooks<br>Ch. 11 Statistical Measures<br>▪ Lesson 1: Mean<br>▪ Lesson 2: Median and Mode<br>▪ Lesson 3: Measures of Variation<br>▪ Lesson 4: Mean Absolute Deviation<br>▪ Variability Solve & Color Worksheet<br>▪ Lesson 5: Appropriate Measures<br>▪ Find Someone Who… (Measures of Center Group Activity)<br>Ch. 12 Statistical Displays<br>▪ Lesson 1: Line Plots<br>▪ Lesson 2: Histograms<br>▪ Histogram Hike<br>▪ Histogram Scavenger Hunt<br>▪ Lesson 3: Box Plots<br>▪ Box Plots Walking Worksheet<br>▪ Lesson 4: Shape of Data Distributions<br>▪ Lesson 5: Interpret Line Graphs<br>▪ Lesson 6: Select an Appropriate Display<br>▪ Statistical Questions Cut and Paste<br><br>Formative:<br>Warm-Ups<br>Homework<br>Quizzes<br>Student-Student Interactions<br>Class Discussions<br>Guided Practice<br><br>Summative:<br>Numbers Never Lie<br>Unit Test | **Unit Test**<br>Communication Skills:<br>• Take effective notes in class<br>Organizational Skills:<br>• Keep an organized and logical system of information files/notebooks<br>Self-Management:<br>• Plan short- and long-term assignments; meet deadlines<br><br>**Numbers Never Lie**<br>Communication Skills:<br>• Interpret and use effectively modes of non-verbal communication<br>• Understand and use mathematical notation<br>• Organize and depict information logically<br>Information and Literacy Skills:<br>• Collect, record and verify data<br>• Understand and use technology systems | Curriculum Objectives:<br>CCSS.MATH.CONTENT.6.SP.A.1<br>Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.<br>CCSS.MATH.CONTENT.6.SP.A.2<br>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.<br>CCSS.MATH.CONTENT.6.SP.A.3<br>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.<br>CCSS.MATH.CONTENT.6.SP.B.4<br>Display numerical data in plots on a number line, including dot plots, histograms, and box plots.<br>CCSS.MATH.CONTENT.6.SP.B.5<br>Summarize numerical data sets in relation to their context, such as by:<br>CCSS.MATH.CONTENT.6.SP.B.5.A<br>Reporting the number of observations.<br>CCSS.MATH.CONTENT.6.SP.B.5.B<br>Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.<br>CCSS.MATH.CONTENT.6.SP.B.5.C<br>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.<br>CCSS.MATH.CONTENT.6.SP.B.5.D<br>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. |

Course: Math
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| | | | | IB Criterion and Strands:<br>**Criterion A: Knowing and understanding**<br>**(Unit Test)**<br>i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations<br>ii. apply the selected mathematics successfully when solving problems<br>iii. solve problems correctly in a variety of contexts<br><br>**Criterion C: Communicating**<br>**(Numbers Never Lie)**<br>i. use appropriate mathematical language (notation, symbols and terminology) in both oral and written explanations<br>ii. use appropriate forms of mathematical representation to present information<br>iii. move between different forms of mathematical representation<br>v. organize information using a logical structure. |
| **Month** | **IB Unit/Topic** | **Assessments and Activities** | **Approaches to Learning** | **Curriculum Standards and IB Criterion and Strands** |
| **Mid October-December** | Unit 2<br>Ratios and Proportional Relationships | Activities:<br>Interactive Student Notebook<br>Ch. 1 Ratios and Rates<br>▪ Introduction to Ratios Fruit Loop Lab<br>▪ Lesson 1: Factors and Multiples<br>▪ Lesson 2: Ratios<br>▪ Mixed Ratio Task Cards<br>▪ Mixed Ratios Find Someone Who…<br>▪ Introduction to Rates Bubble Gum Lab<br>▪ Lesson 3: Rates<br>▪ Unit Rate Scavenger Hunt<br>▪ Mixed Unit Rate Superhero Game<br>▪ Lesson 4: Ratio Tables<br>▪ Lesson 5: Graph Ratio Tables<br>▪ Lesson 6: Equivalent Ratios<br>▪ Equivalent Ratios Solve and Color<br>▪ Lesson 7: Ratio and Rate Problems<br>▪ Problem Solving Dominos | **Unit Test**<br>Communication Skills:<br>• Take effective notes in class<br>Organizational Skills:<br>• Keep an organized and logical system of information files/notebooks<br>Self-Management:<br>• Plan short- and long-term assignments; meet deadlines | Curriculum Objectives:<br>CCSS.MATH.CONTENT.6.RP.A.1<br>Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.<br>CCSS.MATH.CONTENT.6.RP.A.2<br>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.<br>CCSS.MATH.CONTENT.6.RP.A.3<br>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.<br>CCSS.MATH.CONTENT.6.RP.A.3.A<br>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.<br>CCSS.MATH.CONTENT.6.RP.A.3.B |

Course: Math
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Textbook/Instructional Materials: Glencoe Math (Course 1)

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| | | Ch. 2 Fractions, Decimals, and Percents<br>▪ Lesson 1: Decimals and Fractions<br>▪ Lesson 2: Percents and Fractions<br>▪ Lesson 3: Percents and Decimals<br>▪ Lesson 4: Percents Greater than 100% and Percents Less than 1%<br>▪ Percent Models and Percents of a Number Task Cards<br>▪ Lesson 5: Compare and Order Fractions, Decimals, and Percents<br>▪ Fraction, Decimals and Percent Conversions Matching Cards<br>▪ Fraction, Decimals and Percent Conversions Bingo<br>▪ Fraction, Decimals and Percent Conversions Solve and Color<br>▪ Lesson 6: Estimate with Percents<br>▪ Lesson 7: Percent of a Number<br>▪ Lesson 8: Solve Percent Problems<br>▪ Percent Word Problems Scavenger Hunt<br>▪ Percent Mark Up and Discount Task Cards<br><br>Formative:<br>Warm-Ups<br>Homework<br>Quizzes<br>Student-Student Interactions<br>Class Discussions<br>Guided Practice<br><br>Summative:<br>Ratios Performance Task<br>Unit Test | **Ratios Performance Task**<br>Critical Thinking:<br>• Use models and simulations to explore complex systems and issues<br>Transfer Skills:<br>• Apply skills and knowledge in unfamiliar situations | Solve unit rate problems including those involving unit pricing and constant speed.<br>CCSS.MATH.CONTENT.6.NS.B.4<br>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.<br>CCSS.MATH.CONTENT.6.RP.A.3<br>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.<br>CCSS.MATH.CONTENT.6.RP.A.3.A<br>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.<br><br>IB Criterion and Strands<br>**Criterion A: Knowing and understanding (Unit Test)**<br>i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations<br>ii. apply the selected mathematics successfully when solving problems<br>iii. solve problems correctly in a variety of contexts<br><br>**Criterion B: Investigating Patterns (Ratios Performance Task)**<br>i. select and apply mathematical problem-solving techniques to discover complex patterns<br>ii. describe patterns as general rules consistent with findings<br>iii. prove, or verify and justify, general rules. |
| **Month** | **IB Unit/Topic** | **Assessments and Activities** | **Approaches to Learning** | **Curriculum Standards and IB Criterion and Strands** |

Course: Math
Grade Level: 6th
Textbook/Instructional Materials: Glencoe Math (Course 1)

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| **January-February** | Unit 3 Decimals and Fraction Operations | Activities:<br>Interactive Student Notebook<br>Ch. 3 Compute with Multi-Digit Numbers<br>▪ Lesson 1: Add and Subtract Decimals<br>▪ Adding and Subtracting Decimals Scavenger Hunt<br>▪ Adding and Subtracting Decimals Task Cards<br>▪ Lesson 2: Estimate Products<br>▪ Lesson 3: Multiply Decimals by Whole Numbers<br>▪ Lesson 4: Multiply Decimals by Decimals<br>▪ Multiplying Decimals Spin a Product<br>▪ Lesson 5: Divide Multi-Digit Numbers<br>▪ Lesson 6: Estimate Quotients<br>▪ Lesson 7: Divide Decimals by Whole Numbers<br>▪ Lesson 8: Divide Decimals by Decimals<br>▪ Dividing Decimals Spin a Quotient<br>▪ Dividing Decimals Solve and Color<br><br>Ch.4 Multiply and Divide Fractions<br>▪ LCM and GCF Puzzle<br>▪ Adding and Subtracting Fractions Station<br>▪ Adding and Subtracting Fractions Emoji Coloring Sheets<br>▪ Adding and Subtracting Fractions Task Cards<br>▪ Lesson 1: Estimate Products of Fractions<br>▪ Lesson 2: Multiply Fractions and Whole Numbers<br>▪ Lesson 3: Multiply Fractions<br>▪ Lesson 4: Multiply Mixed Numbers<br>▪ Multiplying Fractions Round Table<br>▪ Lesson 5: Convert Measurement Units<br>▪ Measurement Conversions Find | **Compute with Multi-Digit Numbers Test**<br>Critical Thinking:<br>• In order for students to select appropriate mathematics when solving problems in both familiar and unfamiliar situations, students must practice observing carefully in order to recognize problems.<br>Transfer Skills:<br>• In order for students to apply the selected mathematics successfully when solving problems, students must combine knowledge, understanding and skills to create products or solutions.<br>• In order for students to solve problems correctly in a variety of contexts, students must apply skills and knowledge in unfamiliar situations.<br>**Timmy's Tool Mart**<br>Communication Skills<br>• Organize and depict information logically<br>Critical Thinking<br>• Gather and organize relevant information to formulate an argument<br>• Identify obstacles and challenges<br><br>**Weekly Saver** | Curriculum Objectives:<br>CCSS.MATH.CONTENT.6.NS.B.2<br>Fluently divide multi-digit numbers using the standard algorithm.<br>CCSS.MATH.CONTENT.6.NS.B.3<br>Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.<br>CCSS.MATH.CONTENT.6.NS.A.1<br>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.<br>CCSS.MATH.CONTENT.6.RP.A.3<br>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.<br>CCSS.MATH.CONTENT.6.RP.A.3.D<br>Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.<br>CCSS.MATH.CONTENT.6.NS.B.4<br>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. *For example, express 36 + 8 as 4 (9 + 2)...*<br><br>IB Criterion and Strands:<br>**Criterion A: Knowing & Understanding (Compute With Multi-Digit Numbers Test)**<br>i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations<br>ii. apply the selected mathematics successfully when solving problems<br>iii. solve problems correctly in a variety of contexts |

Course: Math
Grade Level: 6th
Textbook/Instructional Materials: Glencoe Math (Course 1)

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| | | Someone Who...<br>▪ Lesson 6: Divide Whole Numbers by Fractions<br>▪ Lesson 7: Divide Fractions<br>▪ Lesson 8: Divide Mixed Numbers<br>▪ Dividing Fractions Solve and Color<br>▪ Dividing Fractions Task Cards<br><br>Formative:<br>Warm-Ups<br>Homework<br>Quizzes<br>Student-Student Interactions<br>Class Discussions<br>Guided Practice<br><br>Summative:<br>Timmy's Tool Mart (Decimals)<br>Weekly Saver (Entire Unit)<br>Unit Test | Critical Thinking:<br>• In order for students to identify relevant elements of authentic real-life situations, students must gather and organize relevant information to formulate an argument.<br>• In order for students to select appropriate mathematical strategies when solving authentic real-life situations, students must practice observing carefully in order to recognize problems.<br>• In order for students to justify whether a solution makes sense in the context of the authentic real-life situation, students must draw reasonable conclusions and generalizations. | **Criterion C: Communicating (Timmy's Tool Mart)**<br>i. use appropriate mathematical language (notation, symbols and terminology) in both oral and written explanations<br>ii. use appropriate forms of mathematical representation to present information<br>iv. communicate complete, coherent and concise mathematical lines of reasoning<br>v. organize information using a logical structure.<br><br>**Criterion D: Applying mathematics in real-life contexts (Weekly Saver)**<br>i. identify relevant elements of authentic real-life situations<br>ii. select appropriate mathematical strategies when solving authentic real-life situations<br>iii. apply the selected mathematical strategies successfully to reach a solution<br>v. justify whether a solution makes sense in the context of the authentic real-life situation. |
| **Month** | **IB Unit/Topic** | **Assessments and Activities** | **Approaches to Learning** | **Curriculum Standards and IB Criterion and Strands** |
| | Unit 4<br>Number System | Activities:<br>Interactive Student Notebook<br>Ch. 5 Integers and Coordinate Plane<br>▪ Lesson 1: Integers and Graphing<br>▪ Lesson 2: Absolute Value<br>▪ Absolute Value Cut and Paste<br>▪ Lesson 3: Compare and Order Integers<br>▪ Lesson 4: Terminating and Repeating Decimals<br>▪ Classifying Rational Numbers Mystery Picture<br>▪ Lesson 5: Compare and Order Rational Numbers<br>▪ Line Up Rational Numbers Cards<br>▪ Ordering Rational Numbers Task Cards<br>▪ Comparing Rational Numbers Task Cards | **Unit Test**<br>Communication Skills:<br>• Take effective notes in class<br>Organizational Skills:<br>• Keep an organized and logical system of information files/notebooks<br>Self-Management:<br>• Plan short- and long-term assignments; meet deadlines<br><br>**Dorm Room Design**<br>Critical Thinking<br>• Gather and organize relevant information to formulate an | CCSS.MATH.CONTENT.6.NS.C.5<br>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.<br>CCSS.MATH.CONTENT.6.NS.C.7<br>Understand ordering and absolute value of rational numbers.<br>CCSS.MATH.CONTENT.6.NS.C.7.A<br>Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.<br>CCSS.MATH.CONTENT.6.NS.C.7.B |

Course: Math
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| | | ▪ Lesson 6: The Coordinate Plane<br>▪ Locating Ordered Pairs Mystery Pattern<br>▪ Locating Ordered Pairs Cut and Paste<br>▪ Lesson 7: Graph on the Coordinate Plane<br>▪ Graphing Coordinates Graph-a-Picture<br>▪ Graphing Coordinates Task Cards<br><br>Formative:<br>Warm-Ups<br>Homework<br>Quizzes<br>Student-Student Interactions<br>Class Discussions<br>Guided Practice<br><br>Summative:<br>Dorm Room Design<br>Unit Test | argument<br>• Consider ideas from multiple perspectives<br>• Identify obstacles and challenges<br><br>Transfer Skills:<br>• Combine knowledge, understanding and skills to create products or solutions | Write, interpret, and explain statements of order for rational numbers in real-world contexts<br>CCSS.MATH.CONTENT.6.NS.C.7.C<br>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.<br>CCSS.MATH.CONTENT.6.NS.C.7.D<br>Distinguish comparisons of absolute value from statements about order.<br>CCSS.MATH.CONTENT.6.NS.C.6<br>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.<br>CCSS.MATH.CONTENT.6.NS.C.6.A<br>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.<br>CCSS.MATH.CONTENT.6.NS.C.6.B<br>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.<br>CCSS.MATH.CONTENT.6.NS.C.6.C<br>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.<br>CCSS.MATH.CONTENT.6.NS.C.8<br>Solve real-world and mathematical problems by graphing 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. |

Course: Math
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| | | | | IB Criterion and Strands<br>**Criterion A Knowing and understanding (Unit Test)**<br>i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations<br>ii. apply the selected mathematics successfully when solving problems<br>iii. solve problems correctly in a variety of contexts<br><br>**Criterion D Applying mathematics in real-life contexts (Dorm Room Design)**<br>i. identify relevant elements of authentic real-life situations<br>ii. select appropriate mathematical strategies when solving authentic real-life situations<br>iii. apply the selected mathematical strategies successfully to reach a solution<br>iv. justify the degree of accuracy of a solution<br>v. justify whether a solution makes sense in the context of the authentic real-life situation. |
| **Month** | **IB Unit/Topic** | **Assessments and Activities** | **Approaches to Learning** | **Curriculum Standards and IB Criterion and Strands** |
| **March-April** | Unit 5<br>Geometry | Activities:<br>Interactive Student Notebook<br>Surface Area Flip Book<br>Ch. 9 Area<br>▪ Lesson 1: Area of Parallelograms<br>▪ Lesson 2: Area of Triangles<br>▪ Area of Triangles Solve and Color<br>▪ Lesson 3: Area of Trapezoids<br>▪ Area of Quadrilaterals Spin to Ten<br>▪ Lesson 4: Changes in Dimension<br>▪ Lesson 5: Polygons on the Coordinate Plane<br>▪ Lesson 6: Area of Composite Figures<br>▪ Area of Composite Figures Solve and Color<br>▪ Modeling Area Formulas Area Lab<br><br>Ch. 10 Volume and Surface Area<br>▪ Lesson 1: Volume of Rectangular Prisms<br>▪ Volume of Rectangular Prisms | **Unit Test**<br>Communication Skills:<br>• Take effective notes in class<br>Organizational Skills:<br>• Keep an organized and logical system of information files/notebooks<br>Self-Management:<br>• Plan short- and long-term assignments; meet deadlines<br><br>**Geometrocity**<br>Critical Thinking:<br>• Use models and | Curriculum Objectives:<br>CCSS.MATH.CONTENT.6.G.A.1<br>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.<br>CCSS.MATH.CONTENT.6.G.A.3<br>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.<br>CCSS.MATH.CONTENT.6.NS.C.8<br>Solve real-world and mathematical problems by graphing 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. |

Course: Math
Grade Level: 6th
Textbook/Instructional Materials: Glencoe Math (Course 1)

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| | | Task Cards<br>▪ Lesson 2: Volume of Triangular Prisms<br>▪ 3D Figures Guess My Figure<br>▪ Lesson 3: Surface Area of Rectangular Prisms<br>▪ Lesson 4: Surface Area of Triangular Prisms<br>▪ Lesson 5: Surface Area of Pyramids<br>▪ Surface Area Cut and Paste<br><br>Formative:<br>Warm-Ups<br>Homework<br>Quizzes<br>Student-Student Interactions<br>Class Discussions<br>Guided Practice<br><br>Summative:<br>Geometrocity<br>Unit Test | simulations to explore complex systems and issues<br>Transfer Skills:<br>• Apply skills and knowledge in unfamiliar situations | CCSS.MATH.CONTENT.6.G.A.2<br>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 = 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.<br>CCSS.MATH.CONTENT.6.G.A.4<br>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.<br><br>IB Criterion and Strands<br>**Criterion A: Knowing and understanding (Unit Test)**<br>i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations<br>ii. apply the selected mathematics successfully when solving problems<br>iii. solve problems correctly in a variety of contexts<br><br>**Criterion B: Investigating Patterns (Geometrocity)**<br>i. select and apply mathematical problem-solving techniques to discover complex patterns<br>ii. describe patterns as general rules consistent with findings<br>iii. prove, or verify and justify, general rules. |
| **Month** | **IB Unit/Topic** | **Assessments and Activities** | **Approaches to Learning** | **Curriculum Standards and IB Criterion and Strands** |
| **May-June** | Unit 6 Expressions and Equations | Activities:<br>Interactive Student Notebook<br>Ch. 6 Expressions<br>▪ Lesson 1: Powers and Exponents<br>▪ Exponent, Expand, Standard Form Cut and Paste<br>▪ Lesson 2: Numerical Expressions<br>▪ Order of Operations Scavenger | **Unit Test**<br>Communication Skills:<br>• Take effective notes in class<br>Organizational Skills:<br>• Keep an organized and | Curriculum Objectives:<br>CCSS.MATH.CONTENT.6.EE.A.1<br>Write and evaluate numerical expressions involving whole-number exponents.<br>CCSS.MATH.CONTENT.6.EE.A.2<br>Write, read, and evaluate expressions in which letters stand for numbers. |

Course: Math
Grade Level: 6th
Textbook/Instructional Materials: Glencoe Math (Course 1)

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| | | Hunt<br>▪ Order of Operations Solve and Color<br>▪ Lesson 3: Algebra: Variables and Expressions<br>▪ Lesson 4: Algebra: Write Expressions<br>▪ Writing Expressions Find Someone Who…<br>▪ Writing Verbal Expressions Matching Cards<br>▪ Simplifying Expressions Speed Dating<br>▪ Lesson 5: Algebra: Properties<br>▪ Lesson 6: The Distributive Property<br>▪ Distributive Property Puzzle<br>▪ Lesson 7: Equivalent Expressions<br>▪ Evaluating Expressions with Variables Task Cards<br><br>Ch. 7 Equations<br>▪ Lesson 1: Equations<br>▪ Lesson 2: Solve and Write Addition Equations<br>▪ Lesson 3: Solve and Write Subtraction Equations<br>▪ Lesson 4: Solve and Write Multiplication Equations<br>▪ Lesson 5: Solve and Write Division Equations<br>▪ One-Step Equations Solve and Color<br>▪ One-Step Equations Scavenger Hunt<br><br>Ch. 8 Functions and Inequalities<br>▪ Lesson 1: Function Tables<br>▪ Lesson 2: Function Rules<br>▪ Lesson 3: Functions and Equations<br>▪ Independent vs. Dependent Variables Card Sort or Cut and Paste<br>▪ Lesson 4: Multiple Representations of Functions<br>▪ Lesson 5: Inequalities | logical system of information files/notebooks<br>Self-Management:<br>• Plan short- and long-term assignments; meet deadlines | CCSS.MATH.CONTENT.6.EE.A.2.A<br>Write expressions that record operations with numbers and with letters standing for numbers.<br>CCSS.MATH.CONTENT.6.EE.A.2.B<br>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.<br>CCSS.MATH.CONTENT.6.EE.A.2.C<br>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).<br>CCSS.MATH.CONTENT.6.EE.A.3<br>Apply the properties of operations to generate equivalent expressions.<br>CCSS.MATH.CONTENT.6.EE.A.4<br>Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them).<br>CCSS.MATH.CONTENT.6.EE.B.5<br>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.<br>CCSS.MATH.CONTENT.6.EE.B.6<br>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.<br>CCSS.MATH.CONTENT.6.EE.B.7<br>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 nonnegative rational numbers.<br>CCSS.MATH.CONTENT.6.EE.B.8 |

Course: Math
Grade Level: 6th
Textbook/Instructional Materials: Glencoe Math (Course 1)

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| | | ▪ Lesson 6: Write and Graph Inequalities<br>▪ Lesson 7: Solve One-Step Inequalities<br>▪ One-Step Inequalities Task Cards<br><br>Formative:<br>Warm-Ups<br>Homework<br>Quizzes<br>Student-Student Interactions<br>Class Discussions<br>Guided Practice<br><br>Summative:<br>Unit Test | | 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.<br>CCSS.MATH.CONTENT.6.EE.C.9<br>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. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.<br>CCSS.MATH.CONTENT.6.NS.B.3<br>Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.<br>CCSS.MATH.CONTENT.6.NS.B.4<br>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.<br><br>IB Criterion and Strands<br>**Criterion A: Knowing and understanding**<br>**(Unit Test)**<br>i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations<br>ii. apply the selected mathematics successfully when solving problems<br>iii. solve problems correctly in a variety of contexts |