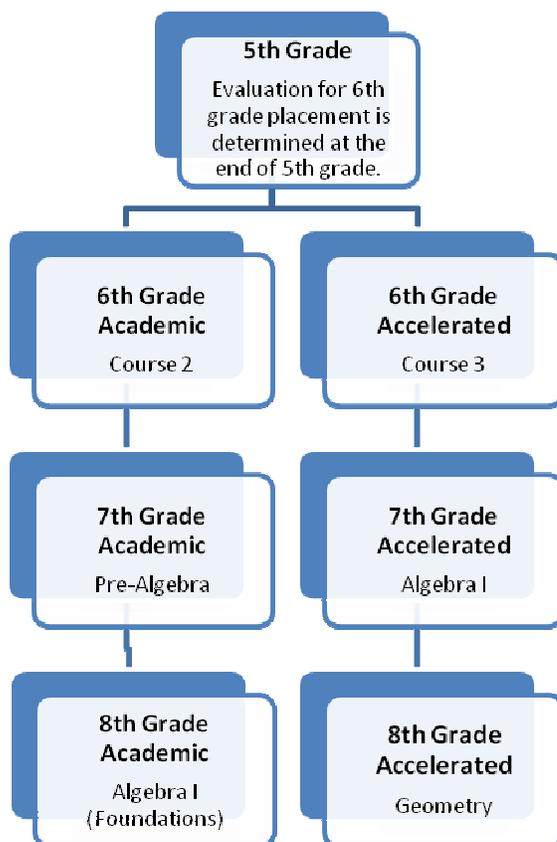


Middle School Math

Guidelines and Assessments:

Flow Chart for Math Levels:



Prerequisites:

Students must maintain an A/B average to remain in the Accelerated program.

All courses use Pearson-Prentice Hall text books.

1. A minimum of 85% or better on the end of year benchmark Test.
2. A minimum of two grade levels above fifth grade on Terra Nova tests.
3. Must have a final grade of A or B in fifth grade math.
4. Must have recommendation from fifth grade teacher.
5. If a child is recommended for accelerated math, parents/guardians must sign the letter that is sent home to inform them.

In some situations, exceptions can be made by the administration.

Assessments (formal and informal):

- Tests
- Quizzes
- Mathleti
- cs
- Pearson
- Success Net
- Benchm
- ark Tests
- Workshe
- ets
- Homewo
- rk
- Online
- Quizzes
- Simple
- Solutions Quizzes
- Online
- Skills Tests
- Projects
- Smart
- Board Activities
- Khan
- Academy
- Board/S
- mart Board Work
- Vocabul
- ary Packets
- Open
- ended writing via chapter tests and benchmarks
- Online
- activities involving investigations of mathematical situations
- Lab
- Activity Investigations
- Different
- iated Instruction/Assessment

****This list is not exhaustive of the assessments used****

Vocabulary:

Mathematical, algebraic, and geometric vocabulary is emphasized in order for students to justify their work, explain a process, compare concepts, or draw conclusions.

Middle School Math Curriculum:

6th Grade Accelerated:

Course 3 Prentice Hall

Assessments:

Various assessments will be used to determine child's mastery of the content.

Areas Covered:

Description: This math class is a foundation for higher level mathematics and contains elements of both Algebra and Geometry topics.

- Numbers and Operation- Students will cover recognition of numbers that includes powers and numbers in scientific notation. Students will use order of operations as they work with numerical expressions; as well as application of proportions, rates, ratios, and percent.
- Measurement- Student knowledge will be expanded to recognize whether measurements are reasonable; Perimeter and area of complex figures will be computed as well as surface area and volume of cubes, rectangular prisms and other three-dimensional solids. Both reflectional and rotational symmetry will be studied. The Pythagorean Theorem will be explored and will be used in problem solving situations, including finding missing measures of right triangles.
- Algebra- Students will examine arithmetic and geometric sequences and use algebraic expressions to predict terms of sequences. Students will graph and solve one and two step equations and inequalities.
- Data Analysis and Probability- Students will build their critical thinking skills as they interpret displays of data and choose appropriate displays for given situations. Histograms, Venn Diagrams, Stem and Leaf plots, Box and Whisker plots, scatter plots,

and circle graphs will be studied. They will determine the probability of compound events and use models to investigate combinations and permutations.

6th Grade Academic:

Course 2 Prentice Hall

Assessments:

Various assessments will be used to determine child's mastery of the content.

Areas Covered:

Description: This math class is a foundation for higher Pre-Algebra/Algebra I and contains elements of both Algebra and Geometry topics.

- Number and Operations- Students reach mastery of integer operations, rates, and ratios. They work with percent applications and exponents, including using square roots.
- Algebra- Students continue to use models, tables, graphs, and symbolic notation to represent algebraic relationships. They solve equations and interpret the slope of a line.
- Geometry- Students continue to use two-dimensional representations of three-dimensional figures. They study congruent and similar figures and transformations.
- Measurement- Students develop and use formulas to find areas of irregular figures, and to find the surface area and volume of prisms and cylinders.
- Data Analysis and Probability- Students continue to study line plots, stem-and-leaf plots, and bar graphs. They analyze survey techniques for bias, and make scatter plots to analyze data.
- Problem Solving- Students use consistent framework for problem solving which identifies four phases: Understand the problem, Make a plan, Carry out the Plan, and Check the Answer.
- Communication- Students use background and progression to effectively communicate mathematically. Students need ample opportunity to express math in words, in symbols, through models, and orally.

7th Grade Accelerated:

Algebra I

Assessments:

Various assessments will be used to determine child's mastery of the content.

Areas Covered:

The following units will be studied in Algebra. Each unit will have at least 1 Quiz and 1 unit exam.

- Algebra expressions and equations- Students write and evaluate algebraic expressions, combine like terms, solve one-step equations, solve and graph one- step inequalities, and make and interpret graphs and tables.
- Operations in Algebra- Students study operations with real numbers and their properties and they use the properties to simplify expressions and solve equations and inequalities.
- Equations- Students solve linear equations in one variable, two-step equations, and multi-step equations.
- Inequalities and Absolute Value- Students solve and graph linear inequalities in one-step, two-step and multi-step and solve and graph compound inequalities.
- Linear equations- Students are introduced to the concept of a function and the special categories of linear and nonlinear functions. They will observe and graph linear and nonlinear functions. With regard to linear functions, students will find slope of a line, investigate several forms of writing an equation for a line, and identify the relationship between parallel and perpendicular lines.
- System of Equations and Inequalities- Students solve systems of linear equations and inequalities by graphing, substitution, and elimination.
- Exponents and Exponential Functions- Students study exponential expressions learn the laws of exponents and use them to simplify expressions containing positive, negative, and zero exponents as well as finding products and quotients of monomials. Exponential growth and decay is also explored.

- Polynomials and Factoring- Students add, subtract, multiply, and divide polynomials, factor using the methods of greatest common factor, special trinomial rules and factor by grouping.
- Quadratic Functions- Students will solve quadratic equations by a variety of methods including graphing, finding the square roots, using the zero product property, or using the quadratic formula.

7th Grade Academic:

Pre-Algebra Prentice Hall

Assessments:

Various assessments will be used to determine child's mastery of the content.

Areas Covered:

The following units will be studied in Pre-Algebra. Each unit will have at least 1 Quiz and 1 chapter test.

- Number and Operations- Students reach mastery of integer operations, proportions, and percents. They master computation with exponents and scientific notation.
- Algebra- Students solve equations and use equivalent forms for expressions involving parenthesis, like terms and exponents. Students relate rate of change, slope and y-intercept to graphs and linear equations.
- Geometry- Students use dimensional analysis to convert units within the customary and metric systems. Students use formulas to find surface areas and volumes of prisms, cylinders, pyramids, cones and spheres.
- Measurement- Students use two-dimensional representations to explore three-dimensional relationships. Congruent and similar figures are studied and transformations occur on a coordinate plane have been introduced. They draw inferences about lengths, areas, and volumes of similar figures.
- Data Analysis and Probability- Students become proficient at analyzing and making circle graphs, stem-and-leaf plots, box-and-whisper plots, double bar graphs, and double line graphs. They analyze and survey techniques for bias and make scatter plots. They use tree diagrams and organized lists to develop probability.

- Reasoning and Proof- Reasoning is an integral part of students' daily work. Every lesson contains a mix of reasoning, number sense, and error analysis exercises. Students justify steps via various procedures and use inductive reasoning.
- Communication- Students use alternative methods in "more than one way" feature and "problem solving exercises" feature in each chapter. These situations give a mix of numeric, algebraic, geometric, and experimental approaches to problems.
- Connections- Students learn 13 specific strategies and apply them to a variety of problems. Students also learn to use more than one strategy to solve a problem.
- Representations- Modeling of fractions, percents, addition, subtraction, multiplication, division, equations, probabilities, and algebraic expressions. Functions relationships are represented through tables, graphs, patterns, words, and variables. Students are given many opportunities to use their own representations for real-life contextual mathematics in the real-world snapshots and real-world problem solving examples.

8th Grade Accelerated:

Geometry Prentice Hall

Assessments:

Various assessments will be used to determine child's mastery of the content.

Areas Covered:

Geometry explores the areas of transformations, measurement, reasoning, and proofs, similarities and coordinate plane graphs.

- Reasoning in Geometry- Students are introduced to ideas and concepts that provide a basis for understanding the deductive nature of geometry.
- Parallels and Polygons- Students explore polygons, properties of quadrilaterals, parallel lines and transversals, sums of interior and exterior angles, and midsegments of triangles and trapezoids.
- Triangle Congruence- Students learn triangle congruence postulates, develop intuitive notions of triangle congruence through exploration, and apply congruence postulates in proofs.
- Perimeter and Area- Students build on previous experiences to explore strategies for finding perimeter, circumference, and area, and also learn key properties for right triangles, including proofs and applications of the Pythagorean Theorem.
- Surface Area and Volume- Students will explore three-dimensional symmetry and calculate the surface area and volume of prisms, pyramids, cylinders, cones, and spheres.
- Similar Shapes- Students explore similar figures through dilations in the plane, constructions, and proofs. Similarity is used to measure distance indirectly and area and volume of similar figures is investigated.

- Circles- Students define relationships among parts of circles and various angles, segments, and arcs.
- Trigonometry- Students develop the tangent, sine, and cosine ratios from both right triangles and unit circles and solve problems using the law of sines and the law of cosines.

8th Grade Academic:

Algebra I Foundations Prentice Hall

Assessments:

Various assessments will be used to determine child's mastery of the content.

Areas Covered:

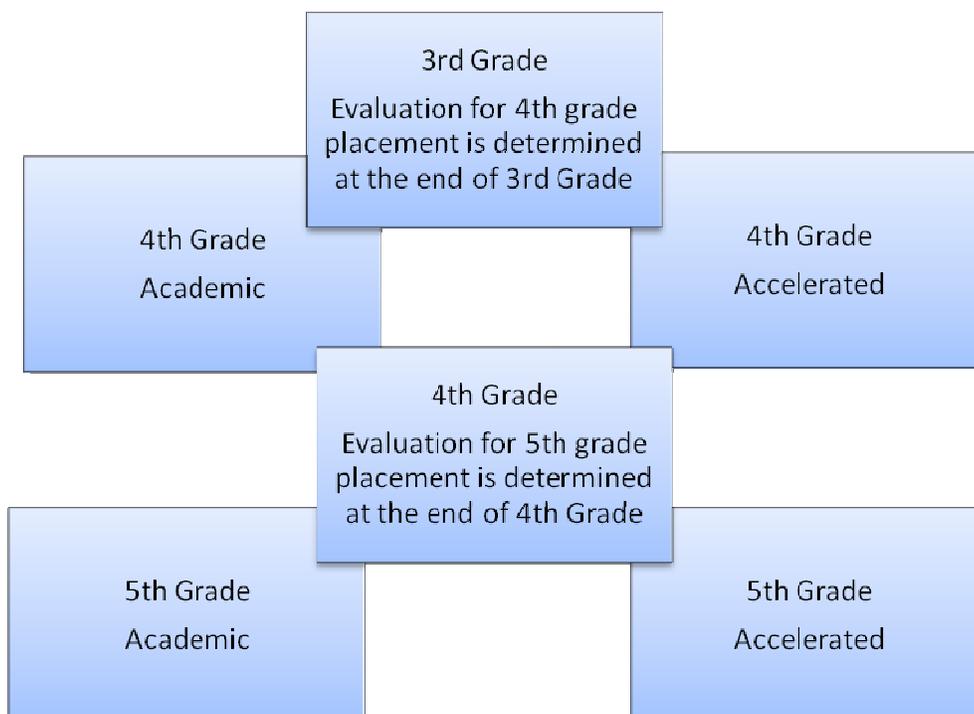
- Numbers and Operations- Students build an understanding of the real number system as they work with rational and radical expressions, equations, and functions.
- Algebra- Students use tables, graphs, verbal and symbolic rules to describe linear, quadratic, and exponential functions. Students study rate of change in the context of direct variation, linear equations, and arithmetic and geometric sequences.
- Geometry- Students make decisions about appropriate scales for graphical representations of data. They use appropriate conversion factors as they write proportions and other equations.
- Measurement- Students begin to use geometric models with proportions, percent, and probability. They also explore ways to describe translations of familiar functions.
- Data Analysis and Probability- Students work with scatter plots and functions to model the relationships between sets of data. They compute probabilities for simple and compound events.
- Communications- Students are supported in the critical skill of expressing mathematical relationships from real world problems with appropriate symbolic models.

Intermediate School Math: Grade 4 and 5

- *Is problem centered and uses content that develops students' understanding of math, appreciations for its applications, ability to communicate by applying math language and vocabulary in oral and written form, and proficiency in computational skills.*

Guidelines and Assessments:

Flow Chart for Math Levels:



All courses use Houghton Mifflin Math Series, Mathletics, and Simple Solutions. Both courses cover the same math concepts, but the accelerated course is at a faster pace and provides opportunities for math investigations and problem solving at a complex level.

Prerequisites for Accelerated Math:

1. Evaluation of the end of year Diocese of Pittsburgh Benchmark Tests
2. Evaluation of the Terra Nova Test in 3rd and 4th grade respectively
3. A final grade of A or B in 3rd and 4th grade respectively in math.
4. A recommendation from Third and Fourth grade teachers respectively.

In some situations, exceptions can be made by the administration in consultation with teachers.

Assessments (formal and informal): Grade 4 and 5

- Tests and Pretests from Math Series Chapter
- from series, teacher made, Simple Solutions, and Mathletics Quizzes
- Diocese Benchmark Tests Pittsburgh

- Ended Questions Applying Math Concepts Open
- Notebooks and Journals Math
- Math Manipulatives or Models to Demonstrate Understanding Using
- k from Houghton Mifflin Workbooks and Worksheets Homework
- Solution Practice Workbook Simple
- : Rainforest, Quizzes, and Skills Practice Mathletics
- Skills Practice for Math Facts Online
- and Investigations Applying Math Concepts Projects
- Board Activities Smart
- Board Work/Smart Board Work/Chalkboard Work White
- y Packets Vocabular
- n and Oral/Written Sharing of Math Reasoning Discussio
- Academy for Understanding and Review Khan
- Quizzes and Math Activities from a variety of sources Online
- ated Instruction/Assessment for Individual Needs Differenti

This list is not exhaustive of the assessments used.

Description of Resources:

Mathletics- Our students interact with 4 million students in over 17,000 schools and homes around the world. Live practice matches students against others from around the world in real-time arithmetic races, powering towards mathematical fluency. Targeted and adaptive practice activities, eBooks, interactives, and video tutorials form the basis of learning. The school pays for the individual subscriptions for students in Grades 4-8th. The students may access the program in school and at home. The program encourages students and rewards results.

Simple Solutions- The lessons contain items which reinforce prior learning skills and concepts that have already been introduced in the classroom, either in the present or in previous years. New concepts are also introduced in some lessons. Students can refer to the Help Pages in the book if there are any items that seem unfamiliar or if more information is needed. Research shows that students will retain what they have learned when they are required to revisit concepts and practice skills on a regular basis.

Intermediate Math Curriculum

4th Grade Academic and Accelerated:

Level 4 for Houghton Mifflin Series, Mathletics, and Simple Solutions

Assessments:

Various assessments will be used to determine child's mastery of the content.

Areas Covered:

Description: This math class is to promote proficiency in the 4th grade math content

- **Numbers and Operation-** understand place value, expanded form, word form, and standard form; subtraction and addition will be applied to decimals, fractions, mixed numbers, measurements, and money; 1 digit and 2 digit multiplication and division will be applied; fact families, factors, multiplies, prime and composite numbers will be identified; arrays will be created using inverse operations; word problems will be solved in one and two steps using all operations; and students will be able to write one, two, and three step word problems.
- **Measurement-** Student knowledge will be expanded to recognize whether measurements are reasonable; the perimeter and area of simple figures will be computed; and students will demonstrate an understanding of length, capacity, and weight; students will be able to read time and temperature; solve simple word problems using weight, capacity, length, time, and temperature.
- **Geometry-** identify polygons and be able to compare and contrast their characteristics; identify different types of angles; identify lines of symmetry; identify congruent and similar figures, line segments, lines, parallel lines, perpendicular lines; name the parts of the circle; be able to rotate figures; build three dimensional objects; identify tessellations; and think visually and spatially.
- **Algebra-** Students will examine patterns; solve expressions; identify basic properties; find patterns in the coordinate plane; describe patterns; use functions tables; and apply the order of operations in simple equations.
- **Data Analysis and Probability-** Students will build their critical thinking skills as they collect data and use charts, tables, and line plots; they will show their data in bar, line, circle, and picto-graphs; they understand mean, average, range, mode, and median of a set of data; they will be able to read and understand different types of graphs and charts; calculate probability of a simple event; determine if the event is fair or unfair; model outcomes using coins, cubes, or spinners.

- **Problem Solving-** Students will use a framework to help them identify what they know, what strategies to use to solve, what key words to use in order to be able to communicate their ideas, what plan to use to solve, and then solve the problem by showing and labeling their work, checking their work, and sometimes explaining their understanding.
- **Communication and Performance-** Students will build their skills to communicate in both written and oral form by applying their MATH LANGUAGE and vocabulary in a small, large, and collaborative group setting. Students will be provided with opportunities to use manipulatives and collaborative learning to enhance their understanding, reasoning skills, find and solve problems. They will be encouraged to connect math to real life situations.

5th Grade Academic and Accelerated:

Level 5 Houghton Mifflin Series, Simple Solutions, and Mathletics

Assessments:

Various assessments will be used to determine child's mastery of the content.

Areas Covered:

Description: This math class aims for students to master 5th grade math concepts, and provide ample opportunities to work collaboratively through math investigations, open ended word problems, and use of manipulatives to apply higher levels of thinking with integration of oral and written skills.

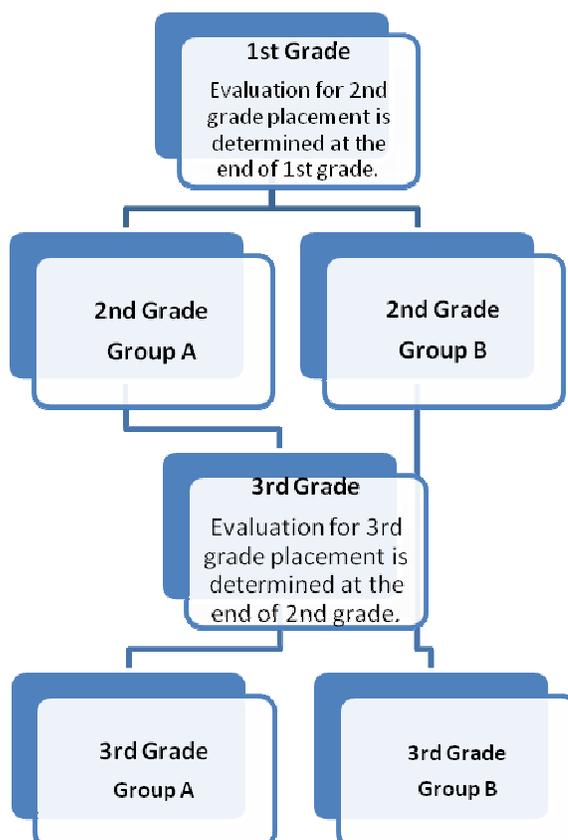
- **Number and Operations-** Students will reach mastery of addition, subtraction, multiplication, and division; add, subtract, multiply, and divide decimals and fractions; rename fractions and decimals; express numbers in different forms; use estimation strategies; list factors for a given number; apply divisibility rules; compare and order numbers; identify prime and composite numbers; find GCF and LCM; relate numbers to real life situations.
- **Algebra-** Students will identify patterns and use function tables; understand algebraic expressions; apply the use of the order of operations; identify and use properties; solve for missing terms in an equation; describe mathematical relationships.
- **Geometry-** Students will identify different types of polygons and describe their characteristics; classify and sort figures and shapes; identify angles, parts of a circle, types of lines, and be able to write them with labels; find symmetry, right angles, parallel lines, perpendicular lines, congruent and similar figures; identify solid figures and nets of a 3-D shape; use tools to draw angles and shapes.
- **Measurement-** Students will investigate and use formulas to find area and perimeter of different types of closed figures; will apply formulas to find circumference and area of a circle; will investigate both customary and metric systems for length, capacity, weight, and temperature; will convert measurements; will solve problems and write word problems using different units of measurement, time, and temperature; will measure surface area and volume.
- **Data Analysis and Probability-** Students will be able to study charts, tables, line plots, stem-and-leaf plots, and gather information to create each type; to create bar, double bar, circle, picto, line, and double line graph; to analyze data and graphs for bias; to interpret data and graphs; to calculate mean, median, mode, and range for a set of data; to find basic probability patterns; and to draw conclusions and make predictions.
- **Problem Solving-** THREE TYPES:

1. Students use a consistent framework for problem solving: Understand the problem, Write what they know, Identify the question, Make a plan, Carry out the Plan, Check the Answer, and Show work with Labels, check their work, and sometimes with a Written Explanation.
 2. Investigations to understand a math concept or formula using manipulatives
 3. Problem solving using concrete manipulatives or situations with written/oral explanations
- **Communication and Performance** - Students will communicate with appropriate “MATH LANGUAGE” and vocabulary in oral, written, and pictorial form; students will have ample opportunities to express math in words, in symbols, through models, and orally; to work in collaborative group situations; to use mental math skills beyond the basic rote memorization of facts; to ask and solve open ended questions; to discover, explore, and reinforce math through the use of appropriate manipulatives.

Primary Math: Grades 1, 2, and 3

Guidelines and Assessments:

Flow Chart for Math Levels:



All primary math grade levels use Houghton Mifflin Math Series, Simple Solutions, and Success Maker. 1st grade groups are randomly placed and not based on prerequisites. Both A & B groups in 2nd and 3rd grade cover the same math concepts, but Group A is at a faster pace and provides opportunities for math investigations and problem solving at an accelerated level.

Determination of Grouping:

1. Evaluation of the quarterly Diocese of Pittsburgh Benchmark Tests from the previous grade.
2. Evaluation of the Terra Nova tests from the previous grade.
3. Final grade in math from the previous school year.

Groups are evaluated each year. Adjustments may be made in either direction to accommodate each student's needs. In some situations, exceptions can be made by the administration.

Assessments (formal and informal):

- Chapter and Unit Tests
- Simple Solutions Quizzes
- Pittsburgh Diocese Benchmark Tests
- Worksheets
- Homework
- Simple Solutions Practice Workbook
- Pearson SuccessMaker
- White Board Work/Smart Board Work/ Chalkboard Work

- Board Activities Smart
- Eduplace Practice Work Online
- ent during collaboration activities Involvem
- Math Manipulatives or Models to Demonstrate Understanding Using
- Math (Grade 2 and 3) Rocket

This list is not exhaustive of the assessments used.

Description of Resources:

Simple Solutions- The lessons contain items which reinforce prior learning skills and concepts that have already been introduced in the classroom, either in the present or in the previous years. New concepts are also introduced in some lessons. Students can refer to the Help Pages in the book if there are any items that seem unfamiliar or if more information is needed. Research shows that students will retain what they have learned when they are required to revisit concepts and practice skills on a regular basis.

Pearson SuccessMaker- SuccessMaker is educational software that differentiates and personalizes reading and math instruction. SuccessMaker provides instruction, practice and assessment for all grade levels of the

program. It is designed to accommodate a full array of different learning styles, and singularly focuses on the individual needs and desires of all students. SuccessMaker is proven instruction to help every child achieve success at their own level.

Rocket Math is a structured timed program for sequential practice of math facts. The program is set up the same way for all four operations (2nd grade-addition and subtraction; 3rd grade-multiplication and division). When a student masters a level, they move on to the next level, which will allow for each student to proceed at their own pace. Repetition of basic facts results in motivation and mastery for every level.

3rd Grade:

Level 3 for Houghton Mifflin Series, Simple Solutions, SuccessMaker, and Rocket Math
Various assessments will be used to determine child's mastery of the content.

Areas Covered:

- **Place Value and Money- Students** recognize and identify different uses of numbers. Read, write, and identify place values of digits in whole numbers through 100,000. Compare, order, and round money and whole numbers through 4 digits. Count coins and bills.
- **Addition & Subtraction-** Students will use addition and subtraction properties to find sums and differences. Use estimation to add and subtract. Add and subtract two-, three-, and four digit numbers with and without regrouping.
- **Data and Probability-** Students will collect, organize, and analyze data using range, median, and mode. Read, make, and interpret line plots, pictographs, bar

graphs, and graphs with ordered pairs. Identify outcomes and determine the likelihood of an occurrence and make predictions.

- **Multiplication and Division** - Students will model multiplication and division using properties and rules for 0-12. Relate multiplication and division using fact families, basic facts, and patterns. Multiply multiples of 10, 100, and 1,000, and estimate products and quotients. Multiply two-, and three- digit by one digit numbers. Divide two-, and three-, digit numbers with and without remainders.
- **Measurement** – Students will read and write time to the minute and elapsed time using clocks and calendars. Students will estimate, measure, compare, and convert customary and metric units of length, capacity, and weight/mass. Read, write, and compare temperature in degrees Fahrenheit and degrees Celsius.
- **Geometry**- Students will name and describe points, lines, line segments, rays, and angles. Identify and classify plane and solid shapes as well as geometric figures. Identify congruent, similar figures, and lines of symmetry. Explore transformations, and estimate and find perimeter, area, and volume.
- **Fractions and Decimals**- Students will identify parts of regions and groups; find fractional parts of a group and equivalent fractions. Identify and write mixed numbers. Compare, order, add, and subtract fractions with like denominators. Identify, compare, order, add, and subtract decimals.

Word problems are incorporated with each of the above areas.

2nd Grade:

Level 2 for Houghton Mifflin Series, Simple Solutions, SuccessMaker, and Rocket Math
Various assessments will be used to determine child's mastery of the content.

Areas Covered:

- **Number Concepts, Operations, and Graphing**- Students will read, write, estimate, order, and compare numbers through 100. Students will take a survey, interpret and create pictographs and bar graphs. Locate objects on coordinate grids, and read and make line graphs and Venn diagrams and determine probability.
- **Addition & Subtraction**- Students will use addition and subtraction strategies to find sums and differences. Use inverse relationship to find missing addends. Use mental math and estimation to add and subtract. Decide when to regroup to add two-digit numbers. Add two and three digit numbers with and without regrouping. Rewrite addition and subtraction problems in vertical format and solve. Use addition to check subtraction. Decide what operation to use to solve word problems.

- **Geometry and Fractions**- Students will identify, describe, classify, and compare plane and solid shapes, and angles. Identify transformations of shapes, draw congruent shapes, and lines of symmetry. Identify, write, and compare fractional parts of a region and a set.
- **Numbers-100 and Patterns** - Students will read, write, order, and compare numbers through 100 including ordinal numbers. Skip count by 2's, 3's, 5's, 10's, to 100. Describe, create, and extend a variety of patterns.
- **Time and Money**- Students will read and write time to 5 minutes. Determine elapsed time, and compare periods of time using a calendar. Count and compare collections of coins and write the value as well as make change. Add and subtract money amounts.
- **Measurement**- Students will estimate, measure, and compare lengths using nonstandard, customary, and metric units. Measure and use models to find area and perimeter. Estimate, measure, and compare to find capacity, weight, and mass of an object. Read a Fahrenheit and Celsius thermometer, and choose the correct measuring tool to measure various objects.
- **Greater Numbers and Operations, Multiplication, and Division**- Students will read, write, order, and compare numbers through 1,000. Multiply using repeated addition, skip counting, and arrays. Students will make equal groups of 2 and 5 and use repeated subtraction to explore division.

Word problems are incorporated with each of the above areas.

Primary Math Curriculum:

1st Grade:

Level 1 for Houghton Mifflin Series, Simple Solutions, SuccessMaker

Various assessments will be used to determine child's mastery of the content.

Areas Covered:

- **Number Concepts, Operations, and Graphing**- Students will cover recognition, counting, ordering, comparing, reading and writing numbers and sets through 20. Model addition and subtraction concepts and properties to solve problems and find sums and differences. Read, make, and use graphs to compare information.
- **Addition & Subtraction**- Students will develop and use math vocabulary relating to addition and subtraction. Use different strategies to count on and back and write and solve related addition and subtraction facts through 12. Add three addends,

and solve for missing addend. Use addition and subtraction strategies to find the sum and difference of two and three digit numbers from 20 without regrouping. Solve word problems using related operation.

- **Geometry and Fractions**- Students will identify, describe, classify, compare, and sort plane and solid shapes. Use position words and grids to describe and locate objects. Identify transformations of shapes and symmetry in shapes. Identify, create, and extend patterns. Identify and name fractional parts of a region.
- **Numbers-100** - Students will identify, read, write, order, and compare numbers through 100. Count, regroup, and identify place value of numbers through 100. Identify ordinal numbers; skip counting by 2's, 5's, and 10's to 100, and even and odd numbers.
- **Time and Money**- Students will tell time to the hour and half hour using analog and digital clocks. Compare time, order events, and determine elapsed time. Use a calendar. Find the value of a group of coins, and show the same amount in different ways.
- **Measurement**- Students will develop and use math vocabulary relating to capacity and temperature. Compare and order the capacity of containers, using cups, pints, quarts, and liters. Understand hot and cold and be able to choose the most reasonable measuring tool to solve problems.

Word problems are incorporated with each of the above areas.

Primary Math Curriculum

Kindergarten

Kindergarten Level Houghton Mifflin Series, Simple Solutions

Various age-appropriate assessments will be used to determine child's mastery of content.

Areas Covered:

- **Numbers concepts, Operations, and Graphing** - Students cover recognition, counting, ordering, comparing, reading and writing numbers and sets through 20. They gather and display data using pictures, tables and pictographs.
- **Addition & Subtraction** - Students model and record addition and subtraction facts through 10.

- **Geometry and Fractions** - Students identify and sort basic plane and solid shapes. They identify, describe and extend patterns. Students use simple fractions to represent quantities.
- **Numbers-100** - Students order sets of numerals 0-10 from least to greatest. They count orally from 1 to 100 and skip count by 5's and 10's.
- **Time and Money** - Students tell time to the hour using analog and digital clocks. They identify times of the day /year and order events. Students identify and compare coins.
- **Measurement** - Students compare and order length, weight, measure capacities of objects using nonstandard units. They identify tools for measuring time, length, weight, capacity and temperature.