Southington Public Schools
Curriculum Map

Subject:_____Math_____   **Grade:____6____**

UNIT TITLE	#1 Operations with Fractions & Decimals I	#2 Operations with Fractions, Decimals, and Percents II	#3 Statistics
CONTENT	• Understanding, comparing and applying fractions • Understanding, comparing and applying decimals	• Estimating with fractions • Adding and subtracting with fractions • Multiply fractions • Adding and subtracting decimals • Multiply, divide decimals	• Collect and organize data • Represent data with line plots, bar graphs and stem-and leaf • Calculating measures of center
STATE STANDARDS	6.2.2. a. Solve problems using a variety of computational strategies including the use of calculators. (1) Estimate and predict reasonable answers and recognize and explain when an estimate will be more or less than an exact answer. (5) Add, subtract and multiply fractions and decimals using a variety of computational strategies. (6) Create and solve a variety of problems involving fractions, decimals, mixed numbers, money and simple percents. 6.2.2.b. Describe when products or quotients with fractions and decimals can yield a larger or smaller result than either factor. (1) Determine the fractional part of a set using procedures connected to models.	6.1.3.b. Demonstrate how to maintain equivalence in equations. (1)Model and solve one-step linear equations by maintaining equivalence. 6.2.1.c. Interpret and connect fraction notation to division. (3) Recognize that multiplication by a unit fraction is equivalent to dividing by the fraction's denominator 6.2.2.a. Solve problems using a variety of computational strategies including the use of calculators. (1) Estimate and predict reasonable answers and recognize and explain when an estimate will be more or less than an exact answer. (5) Add, subtract and multiply fractions and decimals using a variety of computational strategies. (6) Create and solve a variety of problems involving fractions, decimals, mixed numbers, money and simple percents. 6.2.2.b. Describe when products or quotients with fractions and decimals can yield a larger or smaller result than either factor. (1) Determine the fractional part of a set using procedures connected to models. (2) Represent division with decimals, fractions and mixed numbers as related to models and context.	6.4.1.a. Display and compare sets of data using various systematic or graphical representations. (1) Compare sets of data graphically using histograms, double bar graphs, back-to-back stem-and leaf plots and scatter plots. (2) Construct circle graphs and recognize that they represent data proportionally. (3) Use systematic listing and counting strategies to solve problems. 6.4.2.a. Describe the shape of data sets using the measures of spread and central tendency. (1) Describe the shape of data sets using measures of spread (range and outliers) and central tendency (mode, median and mean). (2) Recognize that changes in a data set can affect the mode, median, mean and range.

		7.2.1.a. Represent real world situations and solutions to problems using the appropriate symbolic form (fractions, decimals or percents). (1) Rewrite a rational number in its equivalent fraction, decimal, ratio, and percent forms with number patterns and common factors. (3) Estimate and perform computations with fractions, decimals, mixed numbers, improper fractions, ratios, proportions and percents. (5) Use and describe appropriate methods to divide by a fraction or a decimal.	
ASSESSMENT	**PERFORMANCE TASK** **Inventory Control Manager** **Goal:** Analyze fabric store inventory to find and correct employee errors. **Role:** Newly-hired inventory control manager. **Audience**: Your supervisor, the owner of the fabric store. **Scenario**: The Fantastic Fabric Store has been having difficulty keeping track of its inventory because of the former inventory manager's sloppy calculations. You have been hired by Frank Fantastic, the owner of the store, to find the inventory errors and create a new, correct store inventory. The table below shows the yardage of fabric sold in the Halloween Character Costume section on Thursday and Friday of last week. First, check all the calculations to see where the previous clerk made the errors. Then, complete the last column (Corrected Inventory) showing the correct amounts. Be sure to show all your calculations, so your supervisor can see where the errors were made. Show all final inventory amounts in simplest form. (Inventory table is attached) Mr. Fantastic is so impressed with your expertise that he has given you a new task.	**PERFORMANCE TASK** **Goal:** Arrange and sell advertising space for the Southington newspaper. **Role:** You are the Advertising Executive for the Southington newspaper and are responsible for selling advertising space in the paper. **Audience:** Business owners who advertise in your paper. **Scenario:** Your local newspaper sell advertising space by charging advertisers according to the fraction of a page their ad will fill. Several customers have called to place advertising. **Product:** Calculations for various situations **Standards:** Students will be evaluated on their understanding and application of fractions and decimals. **Differentiated Version of Task:** **Support:** Use compatible fractions, such as fourths and eighths. **Challenge level**: Students will be given several constraints and asked to create advertising bills for three weeks.	**PERFORMANCE TASK** **Goal:** To create a graphical display and written analysis of reading trends in sixth grade. **Role:** You are a sixth grade-reading teacher. **Audience:** Mrs. Van, the Literacy Specialist for JAD Middle School. (Mrs. Rottler, the Literacy Specialist for JFK Middle School) and the Superintendent of Schools, Dr. Polansky. **Scenario:** You are a sixth grade Language Arts teacher, and your students are required to keep track of their daily independent reading in a reader's log. The Literacy Specialist for your school has asked you to analyze your students' independent reading. She is going to include your analysis in a report she is preparing for Dr. Polansky. **Product:** Your job is to create a presentation for your Literacy Specialist. This presentation will include two graphical representations and a written analysis. Your class will tally the following information from your reading logs: type (genre) of books read, number of pages read for each of the 3 weeks of this Mathematics unit, and total number of pages read in these 3 weeks. Using this tally chart (which we completed together in class), prepare BOTH a bar graph and a stem-and-leaf plot

In the table below, show the TOTAL amounts of fabric sold in the Halloween Prints section on Thursday and Friday of last week.   Show all final inventory amounts in simplest form.

(Inventory table is attached)

No calculators to be used to complete task.

Differentiated Version of Task:

Support level: Uses different table, with no regrouping from the whole number in subtraction, and all denominators are factors of each other.

Challenge level: Uses a different table, 3 days of inventory. Some denominators are not factors of each other, includes regrouping from the whole number in subtraction.

representing this data. The bar graph and stem-and-leaf plot should represent different aspects of the data.

Then, prepare a written analysis of the graphical representations and the reading data. This analysis should include at least 2 different types of measures of the central tendencies of your data, and at least 1 measure of the spread of your data.

Standards: Your presentation will be judged by the quality of the two graphs, and by the correct use of central tendency and spread concepts, as well as for neatness, clarity and thoroughness.

Differentiated Version of Task:

Challenge Options: Students must create two different bar graphs, as well as a stem-and-leaf plot, AND/OR, students must identify ALL measures of central tendency and spread of their data.

Support Options: 1. Students provided with template for one or both of their graphs, as well as for their presentation.
  2. OR, Students provided with checklist for task completion,
  3. OR Students provided with modified data tables.

OTHER EVIDENCE
- Journal entries from Investigations, Bits and Pieces II, describing solutions/algorithms
- Quizzes, final assessment project, other assessment pieces from CMP

OTHER EVIDENCE
- Journal entries from Investigations describing solutions/algorithms.
- Quizzes, final assessment project, other assessment pieces from CMP

OTHER EVIDENCE
- Unit Project.
- Journal responses for Investigations
- Assess line graph application with scenario involving change over time (possibly in science).

SKILLS	• Use benchmarks and other strategies to estimate the reasonableness of results of operations with fractions. • Develop ways to model sums, differences, and products with areas, strips, and number lines. • Use estimates and exact solutions to make decisions. • Look for and generalize patterns in numbers. • Use knowledge of fractions and equivalence of fractions to develop algorithms for adding, subtracting, and multiplying fractions. • Select and apply operations and/or estimation strategies to solve problems involving standard fractions, decimals and mixed numbers. • Create story problems which would be solved using addition, subtraction, and multiplication of standard fractions, decimals and mixed numbers.	• Use benchmarks and other strategies to estimate the reasonableness of results of operations with fractions. • Develop ways to model sums, difference, products and quotients with areas, strips, and number lines. • Use estimates and exact solutions to make decisions. • Look for and generalize patterns in numbers • Use knowledge of fractions and equivalence of fractions to develop algorithms for adding, subtracting, multiplying, and dividing fractions. • Write fact families to show the inverse relationship between addition and subtraction, and between multiplication and division. • Explore the relationship between two numbers and their product to generalize the conditions under which the product is larger than both factors, between the factors, or smaller than both factors. • Select and apply operations and/or estimation strategies to solve problems involving standard fractions, decimals and mixed numbers. • Create story problems which would be solved using multiplication and division of standard fractions, decimals and mixed numbers.	• Pose questions, collect data, analyze data, and interpret data to solve problems. • Represent data using line plots, bar graphs, stem-and-leaf plots, and coordinate graphs. • Find and use the ways of describing data, such as the shape of distribution, measures of center (mode, median, mean) and measures of spread (range and outliers). • Compare data sets using a variety of strategies such as comparative representations and measures of center and spread.

Southington Public Schools
Curriculum Map

Subject: **Math** **Grade:** **6**

UNIT TITLE	#4 Moving Between Fractions, Decimals and Percents	#5 Probability	#6 Polygons and Angles
CONTENT	• To compare fractions, decimal and % • To compute tax, discount and tips • To gain an understanding of percentage problems	• Developing understanding of probability • Determine experimental and theoretical probability • Use probability to make predictions	• Understand parts of a polygon and how they are related • Explore symmetries • Measuring angles
STATE STANDARDS	5.2.1.a Extend whole number place value patterns, models and notations to include decimals, which are fractions that have denominators that are multiples of ten. (2) Express numbers in expanded and regrouped forms and use the numbers to support computational strategies. (5) Use models to extend whole number place value concepts and patterns to decimals. 5.2.1.c Express numbers as equivalent fractions, decimals or percents. (1) Represent a rational number in its equivalent fraction, decimal, ratio and percent form with models, number patterns and common factors. 5.2.1.d Represent ratios and proportions and solve problems using models and pictures. (1) Build models to identify and compare ratios and describe quantitative relationships using fraction and decimal equivalents. (2) Use ratios and proportions to solve practical problems such as interpreting maps and scale drawings or identifying probability. 6.2.1.a Relate whole numbers, fractions, decimals and integers to number lines, scales, the coordinate plane and problem solving situations.	6.4.3.a. Understand that probabilities are more reliable to use as predictors when there is a large number of trials. (1) Explore the relationship between the number of trials in an experiment and the predicted outcomes. (2) Design and conduct probability experiments and make predictions about outcomes that are equally likely or not equally likely. 6.4.3.b. Express probability using various numerical representations. (1) Express probabilities as fractions, ratios, decimals and percents. 7.4.3.a. Compare and determine experimental and theoretical probabilities. (1) Identify the two ways of obtaining probabilities—by gathering data from experiments (experimental probability) and by analyzing the possible and likely outcomes (theoretical probability). (2) Conduct experiments and compare experimental to theoretical probabilities. (3) Solve problems involving the probabilities of simple and compound events in familiar contexts.	6.3.1.b. Examine the relationships between the measures of area of 2-dimensional objects and volumes of 3-dimensional objects. (3) Develop and use strategies to determine the volume of rectangular solids and cylinders. 6.3.2.a. Construct similar polygons on coordinate grids. (1) Explore similarity of polygons as a result of dilations (a reduction or enlargement), and their effects on their measurements. 6.3.3.a. Solve problems involving measurement through the use of a variety of tools, techniques and strategies. (1) Estimate and determine length, area, volume, mass and angle measures. (2) Select and use appropriate units, strategies and tools to measure and solve problems involving length, perimeter, area, volume, capacity, weight, mass, temperature and angles.

	(1) Locate, order and compare whole numbers, fractions, decimals and integers on number lines, scales and the coordinate grid. 6.2.1.c Interpret and connect fraction notation and division. (1) Use models and common factors to identify equivalent fractions and their decimal representations. (2) Determine the decimal equivalents of fractions. 6.2.1.d Compare quantities and solve problems using ratios, rates, and percents. (1) Estimate and find percents using benchmarks and number patterns. (2) Convert between rates using ratios and proportions. (3) Solve problems involving ratios, proportions and percents. 7.2.1.a Represent real world situations and solutions to problems using the appropriate symbolic form (fractions, decimals or percents). (1) Rewrite a rational number in its equivalent fraction, decimal, ratio and percent forms with number patterns and common factors. (6) Solve practical problems involving rates, scale factors, mixtures and percents with proportions.		
ASSESSMENT	**PERFORMANCE TASK** The Apprentice (on-level) The Supreme Baseball Bat Company has field-tested a revolutionary new bat design. The results of the field test show that six batters preferred the traditional bat and 18 preferred the revolutionary new design. Based upon these field test results, three of the Supreme Baseball Bat Company apprentices made the following statements: Jason– 30% of the batters preferred the new	**PERFORMANCE TASK** Acme Game Company **Goal:** Create game spinners for the Acme Game Company **Role:** You are the Game Spinner engineer for the Acme Game company **Audience:** The Chief Engineer of the company, your boss. **Scenario:** You are a game engineer for a major board game company. They are trying out several new games, and want you to	**PERFORMANCE TASK** **Goal:** Create a logo for a new architectural firm. **Role:** You are a Graphic Designer responsible for creating a logo for a new architectural firm. **Audience:** The architects forming the new firm. **Scenario:** The architects want a logo design that incorporates the unusual design of their building. They have asked that you only use polygons in your design, which should also

bat.

Jim – 0.5 of the batters preferred the new bat.

Jane – 3/4 of the batters preferred the new bat.

You, as the chairperson of the Board of Directors, must decide which of the apprentices is correct, Jason, Jim or Jane. Which apprentice should hear the words, "You're hired!"? Create a presentation for the stockholders which shows the fraction, decimal and percent which correctly represents the relationship between the batters preferring the revolutionary new bats and the whole group of batters. Your presentation should include words, numbers and pictures, which demonstrate which apprentice is correct.

Then, write a memo to the two incorrect apprentices, explaining and showing them why they were wrong

Differentiated Version of Task:
The Apprentice (modified)

The Supreme Baseball Bat Company has field-tested a revolutionary new bat design. The results of the field test show that six batters preferred the traditional bat and 18 preferred the revolutionary new design. Based upon these field test results, the Supreme Baseball Bat Company apprentice made the following statement:

Apprentice: – "3/4 of the batters preferred the new bat."

You, as the chairperson of the Board of Directors, must decide whether the apprentice is correct, and whether she should hear the words, "You're hired!"? Create a presentation for the stockholders

design 3 spinners that meet certain specifications. If you meet the chief engineer's specifications, you will get an extra week of vacation this year.

Product: You must design 3 spinners, as listed below:

1. A spinner for 2 outcomes, each having an equally likely probability of occurring, but with more than 2 spaces.

2. A spinner for 5 outcomes, 2 outcomes have a greater probability of occurring than 3 others.

3. A spinner for 6 outcomes, 1 outcome has a greater probability of occurring than 5 others.

In addition, write a memo to the chief engineer, explaining how you know your spinners meet these requirements.

Standards: Students will be assessed on their ability to create the spinners to the specifications above, and on their explanation of probability. Student copy of the task will include circular spinner models with the center identified.

Differentiated Version of Task:

Challenge:

1. A spinner for 5 outcomes, 2 outcomes have a greater probability of occurring than 3 others.

2. A spinner for 6 outcomes, 1 outcome has a greater probability of occurring than 5 others.

3. A spinner for 4 outcomes, each with an equally likely probability of occurring, but with more than 4 spaces.

Support:

1. A spinner for 2 outcomes, each having an equally likely probability of occurring, but with more than 2 spaces.

2. A spinner for 4 outcomes, each having an

include the firm name, Angular Architectural Associates.

Product:

1. A logo design that utilizes one rectangle and at least 3 other non-rectangular polygons, as well as at least one example of a transformation.

2. A description of at least 3 different benchmark angles and the polygons used in the creation of the logo design.

Standards: Students will be evaluated on their understanding and application of geometric shapes and angles.

Differentiated Version of Task:

Support:
Scaffold design and explanation steps as needed.

Challenge level:
Design a tile floor for the building foyer that incorporates the logo you have designed and utilizes a different type of transformation than the one used in your logo design.

which shows the fraction, decimal and percent which correctly represents the relationship between the batters preferring the revolutionary new bats and the whole group of batters. Your presentation should include words, numbers and pictures which demonstrate whether the apprentice is correct. The Apprentice (Challenge) The Supreme Baseball Bat Company has field-tested a revolutionary new bat design. The results of the field test show that six batters preferred the traditional bat and 18 preferred the revolutionary new design. Based upon these field test results, three of the Supreme Baseball Bat Company apprentices made the following statements: Jason– 80% of the batters preferred the new bat. Jim – 0.75 of the batters preferred the new bat. Jane – 7/8 of the batters preferred the new bat. You, as the chairperson of the Board of Directors, must decide which of the apprentices is correct, Jason, Jim or Jane. Which apprentice should hear the words, "You're hired!"? Create a presentation for the stockholders which shows the fraction, decimal and percent which correctly represents the relationship between the batters preferring the revolutionary new bats and the whole group of batters. Your presentation should include words, numbers and pictures which demonstrate which apprentice is correct. Then, write a memo to the two incorrect apprentices, explaining and showing them why they were wrong.	equally fair chance of occurring. 3. A spinner for 5 outcomes, 2 outcomes have a greater probability of occurring than 3 others.

	OTHER EVIDENCE • Journal responses from Investigations • Quizzes and tests; see CMP2 Assessment CD for assessment ideas. • Informal analysis of selected homework and class work assignments.	**OTHER EVIDENCE** • Journal responses for Investigations • Quizzes and tests • Informal evaluation of selected homework and seatwork assignments.	**OTHER EVIDENCE** • Journal responses to Investigations, etc. and to CMT-style explanations of symmetry, congruence, similarity and comparing geometric figures (i.e. square and trapezoid). • Additional quizzes and tests • Informal evaluation of selected seatwork and homework assignments.
SKILLS	• Build an understanding of fractions, decimals, and percents and the relationships between and among these concepts and their representations. • Develop ways to model situations involving fractions, decimals and percents. • Understand and use equivalent fractions to reason about situations. • Change mixed numbers to improper fractions and vice versa. • Compare and order fractions. • Locate, identify and order whole numbers, fractions, mixed numbers, decimals (tenths and hundredths) on number lines, scales and the coordinate plane. • Use benchmarks such as 0, ½, 1, and 1½ to help estimate the size of a number or sum. • Develop and use benchmarks that relate different forms of representations of rational numbers (for example, 50% , 0.5, ½). • Simplify answers and recognize simplest form. • Determine when a situation requires an exact answer or when an estimate is sufficient and explain the estimation strategy.	• Determine the probability of simple events and justify reasoning. • Understand the concepts of equally likely and not equally likely. • Interpret statements of probability to make decisions or answer questions. • Determine "fairness" and justify reasoning. • Develop strategies for using theoretical probability by analyzing equally likely outcomes. • Organize data into lists or charts to help find probability. • Analyze and interpret displayed data to find experimental probability.	• Estimate and measure any angle using reference to benchmark angles and appropriate tools. • Explore parallel lines and angles created by lines intersecting parallel lines • Find patterns that help determine angle sums of polygons. • Draw or sketch polygons with certain properties. • Reason about and solve problems involving shapes.

Southington Public Schools
Curriculum Map

Subject: **Math** **Grade:** **6**

UNIT TITLE	#7 **Geometric Shapes and Symmetry**	#8 **Area and Perimeter**	#9 **Algebraic Reasoning**
CONTENT	• Review of basic two dimensional shapes	• Interpret area and perimeter of a two-dimensional shape • Develop strategies to find area and perimeter • To study the relationship between area and perimeter	• To develop an understanding of balance, patterns and functions
STATE STANDARDS	4.3.1.a. Describe geometric properties of polygons and solids (1) Build, draw, describe & classify two- and three-dimensional figures. (2) Analyze two-dimensional shapes and determine lines of symmetry and congruence. (3) Identify translations, reflections and rotations in geometric designs. 6.3.1.a. Classify polygons according to their properties. (1) Use the relationships of sides and angles to classify sets and subsets of polygons. (2) Make and test conjectures about side and angle relationships and congruence. 6.1.1.a. Identify relationships and make generalizations through the use of patterns. (1) Describe, analyze, and extend numeric, geometric and statistical patterns and use them to identify trends and justify predictions.	6.3.1.b. Examine the relationships between the measures of area of 2-dimensional objects and volumes of 3-dimensional objects. (1) Use the rectangle as a basic shape to model and develop formulas for the area of triangles, parallelograms, trapezoids and circle. (2) Develop and use strategies to determine the volume of rectangular solids and cylinders. 6.3.3.a. Solve problems involving measurement through the use of a variety of tools, techniques and strategies. (1) Estimate and determine length, area, volume, mass and angle measures. (2) Select and use appropriate units, strategies and tools to measure and solve problems involving length, perimeter, area, volume, capacity, weight, mass, temperature and angles. 6.3.3.b. Use specific ratios to convert between measures of length, area, volume, mass and capacity in the customary and metric systems. (1) Use different ratios to convert between units of length, area and volume in the customary and metric systems. (2) Recognize and use powers of ten as conversion ratios in the metric system. 6.1.1.a. Identify relationships and make generalizations through the use of patterns. (1) Describe, analyze, and extend numeric,	1.1.a Identify relationships and make generalizations through the use of patterns. (1)Describe, analyze and extend numeric, geometric and statistical patterns and use them to identify trends and justify predictions. 1.2.a Represent and analyze mathematical relationships with the help of tables, graphs, equations and inequalities. (1)Determine the nature of changes in linear relationships using graphs, tables and equations. (2)Represent numerical and contextual situations with algebraic expressions, equations and inequalities. 1.3.a Solve real-world problems using algebraic methods. (1)Use variables as placeholders, to denote a pattern, to write a formula and to represent a function or relation. (2)Evaluate algebraic expressions and formulas using substitution. 1.3.b Demonstrate how to maintain equivalence in equations. (1)Model and solve one-step linear equations by maintaining equivalence.

		geometric and statistical patterns and use them to identify trends and justify predictions. 6.1.3.a. Solve real world problems using division algebraic methods. (2)Evaluate algebraic expressions in formulas using substitution. 6.4.1.a. Display and compare sets of data using various systematic or graphical representations. (1) Use systematic listing and counting strategies to solve problems.	
ASSESSMENT	<u>**PERFORMANCE TASK**</u> Mini Review Unit No Performance Task	<u>**PERFORMANCE TASK**</u> **Goal:** Price out 4 types of floor covering for your client's new bedroom and bathroom. **Role:** You are an interior design consultant, working with a client who wants to re-decorate her sixth grader's bedroom and bathroom. **Audience:** Your client and her sixth grader. **Scenario:** Ms. Cliente is redecorating her sixth grader's bedroom and bathroom. Plans for painting are done, but the flooring is the big problem. Your client wants different flooring types for the closet and the bathroom. She wants the bedroom to be either hardwood or carpeting, and the bathroom to be either tile or linoleum. **Product:** Your task is to create a table for your client showing the perimeter and area of both sections (bedroom and bathroom). Use the floor plan below, which shows the measurements of the rooms. Then, using the price list below, price out the cost of the 4 types of floor covering and cove molding for both areas (sold by the linear foot). Then, write a proposal to your client, explaining how you found your results. **Standards:** The students will be judged on the accuracy of their calculation of perimeter, area and the cost of the flooring, as well as on their explanation to their client.	<u>**PERFORMANCE TASK**</u> Cargo Captain **Goal:** To understand the idea of balance in solving equations. **Role:** You are a Captain of a Cargo ship having to transport several stacks of blocks to another port. **Audience:** Your crew **Scenario:** You know as a captain of a cargo ship that the key to transporting material and keeping your ship safe – you must maintain balance on either end of your ship. You are presented with piles of blocks to move – each color equals a different weight? How can you move these blocks? How many trips will you have to make? (remember gas/oil – keep to the fewest trips) **Product:** You will create a table to show how you kept your ship balanced while moving the blocks. the weight you had on each side of your ship and the number of trips you had to make. **Standards:** The performance task would require correct tables, and presentation of information. If the ship is unbalanced – you sink!!

		Differentiated Version of Task:	**Differentiated Version of Task:**
		Challenge: Students find area and perimeter for bedroom, closet and bathroom, and 6 different choices for flooring. **Support:** Checklist for completion; use calculators?	• Amount of blocks and weigh can be changed to meet the student's needs.
	<u>**OTHER EVIDENCE**</u> • Journal responses from Investigation 1 from <u>Shapes and Designs</u> • Quizzes and tests from CMP 2, see TM <u>Shapes and Designs.</u> • Informal analysis of selected homework and seatwork assignments.	<u>**OTHER EVIDENCE**</u> • Journal responses from Investigations. • Quizzes and tests from CMP 2. • Informal analysis of selected homework and seatwork assignments.	<u>**OTHER EVIDENCE**</u> • Tests • Quizzes • Hands-on-activities • Journal writing
SKILLS	• Identify, draw, describe, compare and classify plane and solid geometric shapes/figures. • Draw geometric figures with specified properties such as side lengths and determine types of angles and triangles. • Identify, draw and describe lines of symmetry. • Identify, create and describe congruent and similar objects. • Create, describe, extend and analyze geometric patterns. • Solve problems involving the organization of data, including dichotomous sorts and Venn diagrams, using geometric figures and explain solutions.	• Develop strategies and formulae for finding area and perimeter of rectangles, triangles and parallelograms. • Measure and find the volume of a rectangular prism. • Investigate the relationship between area and perimeter. • Select and use appropriate measurement tools and units to estimate or measure length, perimeter, area, volume, capacity, time, temperature, mass, and weight. • Convert from one unit to another within the same measurement system.	• Use PEMDAS to solve number sentences using multiple operations. • Recognize and use the Commutative property in Addition and Multiplication. • Recognize and use the Associative property in Addition and Multiplication. • Recognize that subtraction does not have either property. • Complete "Scale" work on Balance. • Solve the "Shape Equations" and give their explanations. • Solve one step equations with whole numbers.