CONTENT AREA: Math CLASS: 5<sup>th</sup> Grade

- Place value of whole numbers and decimals - Comparing and ordering whole numbers and decimals - PSS – look for a pattern - Technology – use a calculator  Addition and Subtraction  Addition properties - Estimation of whole number and decimal sums and differences - Mental math strategies - number patterns - Technology - calculator  Multiplication - Properties of multiplication - Properties of multiplication - Computing products - Estimation - Comparing and ordering whole number and decimals sums and differences - Mental math strategies - number patterns - Daily spiral reviews - Centers - Writing - Test - Quick check - Daily spiral reviews - Centers - Round whole numbers and decimals - Look for a pattern - Understand and apply addition proper - Estimate and find whole number sum and differences - Use mental math strategies to find strategies to find strategies or find strategies or find a difference or multiplication - Properties of multiplication - Properties of multiplication - Properties of multiplication - Properties of multiplication - Computing products - Estimation - Omputing products - Estimation - Computing products - Estimation - Text/ lecture - Daily spiral reviews - Test - Quick check - Daily spiral reviews - Test - Visual animations - Test - Visual animations - Visual animations - Test - Quick check - Daily spiral reviews - Test - Test - Understand and apply addition properies of multiplication - Use calculator to find a difference - Indeption or multiplication - Understand and apply addition properies of multiplication - Use calculator to find a difference - Daily spiral reviews - Find number patterns - Draw a picture/write an equation - Use calculator to find a difference or multiplication - Use mental math strategies or find products - Draw a picture/write an equation - Use calculator to find a difference or multiplication - Use mental math strategies or find products - Find number patterns - Draw a picture/write an e	UNITS OR THEMES	INSTRUCTIONAL STRATEGIES, SIGNIFICANT ACTIVITIES	FORMS OF ASSESSMENT	Learning Outcomes
Addition properties - Estimation of whole number and decimal sums and differences - Mental math strategies - number patterns - Technology - calculator  Multiplication - Properties of multiplication - Mental math strategies - Estimation - Computing products - Exponents - PSS draw picture/write an equation  Addition properties - Use mental math strategies to find st and differences - Use mental math strategies to find st and differences - Use mental math strategies to find st and differences - Find number patterns - Test - Test - Test - Quick check - Daily spiral reviews - Test - Test - Understand & apply properties of multiplication - Use calculator to find a difference - Understand & apply properties of multiplication - Use mental math strategies to find products - Daily spiral reviews - Daily	<ul> <li>Place value of whole numbers and decimals</li> <li>Comparing and ordering whole numbers and decimals</li> <li>PSS – look for a pattern</li> </ul>	<ul><li>Text/ lecture</li><li>Daily spiral reviews</li><li>Homework</li><li>Games</li></ul>	<ul><li>Daily spiral reviews</li><li>Centers</li><li>Writing</li></ul>	<ul> <li>Understand place value relationships an values</li> <li>Round whole numbers and decimals</li> </ul>
Multiplication - Properties of multiplication - Mental math strategies - Estimation - Computing products - Exponents - PSS draw picture/write an equation  - Text/ lecture - Daily spiral reviews - Daily spiral reviews - Daily spiral reviews - Centers - Writing - Text	Addition properties - Estimation of whole number and decimal sums and differences - Mental math strategies - number patterns - Technology - calculator	<ul><li>Text/ lecture</li><li>Daily spiral reviews</li><li>Homework</li><li>Base ten blocks</li><li>Games</li></ul>	<ul><li>Daily spiral reviews</li><li>Centers</li><li>Writing</li></ul>	<ul><li>Use mental math strategies to find sums and differences</li><li>Find number patterns</li><li>Draw a picture/write an equation</li></ul>
- self reflection and evaluation	Multiplication - Properties of multiplication - Mental math strategies - Estimation - Computing products - Exponents - PSS draw picture/write an	<ul><li>Daily spiral reviews</li><li>Games</li></ul>	<ul><li>Daily spiral reviews</li><li>Centers</li><li>Writing</li></ul>	multiplication - Use mental math strategies to find products - Use rounding and compatible numbers estimate products - Find products with 3 digit factors - Understand and write numbers as exponents - Draw a picture/write an equation - writing to communicate

	UNITS OR THEMES	INSTRUCTIONAL STRATEGIES	FORMS OF ASSESSMENT	LEARNING OUTCOMES
	Division Single digit - mental math strategies - multiples of 10, 100 - estimating quotients - using models (money) - computing quotients - understanding divisibility and factors - prime and composite numbers - PSS – draw a picture - Technology – calculator	- Text/ lecture - Daily spiral reviews - Games - Differentiation	<ul> <li>Quick check</li> <li>Daily spiral reviews</li> <li>Centers</li> <li>Writing</li> <li>Test</li> </ul>	<ul> <li>Apply mental math strategies</li> <li>Use rounding, compatible numbers to estimate</li> <li>Interpret remainders</li> <li>Modeling division using money</li> <li>Algebra - Completing a number sentence</li> <li>Find quotients with single digit divisors</li> <li>Use a calculator to find a quotient, remainder</li> <li>Use divisibility rules to find factors</li> <li>Finding prime factorization of a number</li> <li>Solving problems by drawing a picture</li> </ul>
Quarter 2	2 digit	- Text/ lecture - Daily spiral reviews - Games - Differentiation	<ul> <li>Quick check</li> <li>Daily spiral reviews</li> <li>Centers</li> <li>Writing</li> <li>Test</li> </ul>	<ul> <li>Use patterns to find quotients</li> <li>Use compatible numbers to find quotients</li> <li>Solve multistep problems</li> <li>Compute quotients with 2-digit divisors</li> <li>Algebra – complete table using a pattern</li> <li>Solve problems with extra/missing information</li> </ul>
	Variables and Expressions - translating words to expressions - using patterns to show relationships - evaluating expressions with variables - distributive property in expressions - order of operations	<ul><li>visual animations</li><li>Text/ lecture</li><li>Daily spiral reviews</li><li>Games</li><li>Differentiation</li></ul>	<ul> <li>Quick check</li> <li>Daily spiral reviews</li> <li>Centers</li> <li>Writing</li> <li>Test</li> </ul>	<ul> <li>Translate words into expressions</li> <li>Use patterns to show relationships</li> <li>Write and evaluate expressions with variables</li> <li>Use the distributive property to write expressions and solve equations</li> <li>Evaluate an expression with more than one operation</li> </ul>

	UNITS OR THEMES	INSTRUCTIONAL STRATEGIES	FORMS OF ASSESSMENT	STANDARDS
	Shapes Points, Lines, Angles Polygons Triangles – properties, types Quadrilaterals – properties, types	<ul> <li>Visual animations</li> <li>Text/ lecture</li> <li>Daily spiral reviews</li> <li>Games</li> <li>Differentiation</li> <li>Geometer sketchpad computer program</li> </ul>	<ul> <li>Quick check</li> <li>Daily spiral reviews</li> <li>Centers</li> <li>Writing</li> <li>Test</li> <li>Geo-sketchpad activities</li> </ul>	- use geometric terms to describe locations and parts of space - measure, draw and classify angles - identify and classify polygons, triangles and quadrilaterals - make generalizations
Quarter 3	Fractions and Decimals Mixed numbers and improper fractions Equivalent fractions Comparing and ordering Simplest form Fractions and decimals	<ul> <li>Visual animations</li> <li>Text/ lecture</li> <li>Daily spiral reviews</li> <li>Games</li> <li>Differentiation</li> </ul>	<ul> <li>Quick check</li> <li>Daily spiral reviews</li> <li>Centers</li> <li>Writing</li> <li>Test</li> </ul>	<ul> <li>identify and show fractional parts of regions and sets</li> <li>model fractions by dividing into equal parts</li> <li>express numbers greater than 1 as mixed number or improper fraction</li> <li>identify and find equivalent fractions</li> <li>Compare and order fractions and mixed numbers</li> <li>Determine factors and greatest CF</li> <li>Identify and find simplest form</li> <li>Represent decimals through 1,000ths as</li> </ul>
	Adding and Subtracting Fractions and Mixed numbers Add/subtract like denominators Fractions and equations Common multiples Subtract unlike denominators Add/Subtract mixed numbers PSS – Try, check and revise	<ul><li>Visual animations</li><li>Text/ lecture</li><li>Daily spiral reviews</li><li>Games</li><li>Differentiation</li></ul>	<ul> <li>Quick check</li> <li>Daily spiral reviews</li> <li>Centers</li> <li>Writing</li> <li>Test</li> </ul>	fractions  - Label fractions and decimals on a number line  - add/subtract with like denominators - find missing fraction in an equation - find common multiples and LCM - add fractions with unlike denominators - subtract fractions with unlike denominat - add and subtract mixed numbers
	Multiplying Fractions and Mixed numbers Multiply fractions and whole numbers Multiply 2 fractions Multiply mixed numbers Relate division to multiplication of fractions PSS – Draw a picture, write an equation	<ul><li>Visual animations</li><li>Text/ lecture</li><li>Daily spiral reviews</li><li>Games</li><li>Differentiation</li></ul>	<ul> <li>Quick check</li> <li>Daily spiral reviews</li> <li>Centers</li> <li>Writing</li> <li>Test</li> </ul>	<ul> <li>PSS – use 3 steps – try, check revise</li> <li>multiply a fraction by a whole number</li> <li>multiply 2 fractions</li> <li>multiply mixed numbers</li> <li>divide whole numbers by fractions</li> <li>PSS – draw a picture, write an equation</li> </ul>
	an equation			

	UNITS OR THEMES	INSTRUCTIONAL STRATEGIES	FORMS OF ASSESSMENT	STANDARDS
	Graphs and Data Data from surveys Bar, picture and line graphs Stem and leaf plots Histograms Mean. Median, mode and range PSS – Make a graph	- Visual animations - Text/ lecture - Daily spiral reviews - Games - Differentiation	<ul> <li>Quick check</li> <li>Daily spiral reviews</li> <li>Centers</li> <li>Writing</li> <li>Created graphs</li> <li>Test</li> </ul>	<ul> <li>display data collected in a survey</li> <li>create and interpret bar graphs</li> <li>represent data on a line graph</li> <li>read a stem and leaf plot</li> <li>create and interpret histograms</li> <li>use fractions and percent to create circle graph</li> <li>find the mean of a set of data</li> <li>find medial, mode, range of data sets</li> <li>use graphs in problem solving</li> </ul>
Quarter 4	Perimeter and Area Using customary and metric units of length Perimeter Area of square and rectangle Area of parallelogram Area of a triangle Circle and circumference PSS – Draw a picture, Make an organized list	<ul> <li>Visual animations</li> <li>Text/ lecture</li> <li>Daily spiral reviews</li> <li>Games</li> <li>Create models/drawings</li> <li>Differentiation</li> </ul>	<ul> <li>Quick check</li> <li>Daily spiral reviews</li> <li>Centers/games</li> <li>Writing</li> <li>Test</li> </ul>	<ul> <li>use fractions on a ruler to measure objects in customary units</li> <li>choose appropriate metric units to measure length</li> <li>find the perimeter of polygons</li> <li>use formulas to find area of squares, rectangles, parallelograms and triangles</li> <li>identify basic parts of a circle</li> <li>prove pi</li> <li>use formula to find the circumference of a circle</li> </ul>
	Probability Outcomes Writing probability as a fraction Experiments and predictions	- Visual animations - Text/ lecture - Daily spiral reviews - Games - Differentiation	- Quick check - Daily spiral reviews - Centers/games	<ul> <li>use a tree diagram to list possible outcomes</li> <li>use fractions to represent probaility of an event</li> <li>use probaility to make predictions</li> </ul>