

## Second Grade Math

Students at St. Patrick’s will develop into individuals with the ability to use the process skills of inquiry to discover answers to questions. Using various instructional tools, students will deepen their understandings of numeration, operations and computation, data and chance, geometry, measurement and reference frames, patterns, functions and algebra.

Students’ progress will be assessed using a variety of tools: including lab experiments, drawing or completing diagrams, reports, essays, or other written evidence of mastery, chapter and unit assessments, and participation in activities.

	<u>Standards/Goals</u>	<u>Instructional Tools</u>	<u>Assessment Tools</u>
<b>Unit 1</b> <b>Numbers and Routines</b>	a. Students will complete number sequences and identify number patterns to solve problems b. Students will find equivalent names for numbers c. Students will compare numbers using $<$ , $>$ and $=$ d. Students will identify place value for ones, tens, and hundreds. e. Students will learn additions facts for sums up to ten. f. Students will calculate the values of coins and bill combinations	Class number grid Pattern block templates Base 10 blocks Tool kit coins Class thermometer Slates Number cards decks Student journals	Home links worksheets Student Journals Tests Chapter Reviews Slate Assessment Math Boxes Unit Assessment Teacher Observations
<b>Unit 2</b> <b>Addition and Subtraction Facts</b>	a. Students will know harder addition and subtraction facts b. Students will complete “Whats My Rule?” tables c. Students will solve subtraction number stories d. Students will construct fact families for addition and subtraction e. Students will complete frames and arrows diagrams	Demonstration clock Class Facts Table Dominoes Sets Slate Number card decks Number grid poster Fact Triangles Student Journals	Home links worksheets Student Journals Tests Chapter Reviews Slate Assessment Math Boxes Unit Assessment Teacher Observations

	<u>Standards/Goals</u>	<u>Instructional Tools</u>	<u>Assessment Tools</u>
<b>Unit 3</b> <b>Place Value, Money, and Time</b>	a. Students will learn how to make change with coins b. Students will tell time to five minute intervals c. Identify place value in two digit and three digit numbers d. Students will know harder subtraction facts e. Solve frames and arrows problems having two rules	Slates Number cards decks Student journals Six sided dice Geoboards/Rubber Bands Fact Triangles Overhead Coins	Home links worksheets Student Journals Tests Chapter Reviews Slate Assessment Math Boxes Unit Assessment Teacher Observations
<b>Unit 4</b> <b>Addition and Subtraction</b>	a. Devise and use strategies for finding sums and differences of two digit numbers b. Estimate approximate cost and sums c. Read degrees Fahrenheit on a thermometer d. Students will add and subtract with multiples of ten.	Slates Number cards decks Student journals Class Thermometer poster Pan Balance Base 10 blocks Pattern blocks Attribute blocks Tape measure	Home links worksheets Student Journals Tests Chapter Reviews Slate Assessment Math Boxes Unit Assessment Teacher Observations
<b>Unit 5</b> <b>3-D and 2-D Shapes</b>	a. Students will identify 3-D shapes such as cones, prisms, pyramids, cylinders and spheres b. Students will identify symmetrical figures c. Find common attributes of shapes d. Identify parallel and nonparallel line segments e. Students will draw line segments	Slates Number cards decks Student journals Attribute blocks Geoboards/rubber bands Pattern blocks straws	Home links worksheets Student Journals Tests Chapter Reviews Slate Assessment Math Boxes Unit Assessment Teacher Observations
<b>Unit 6</b> <b>Whole-Number Operations and Number Stories</b>	a. Students will solve stories about multiples or equal groups b. Students will solve equal grouping and equal sharing	Slates Number cards decks Student journals Pennies/counters Overhead base 10 blocks	Home links worksheets Student Journals Tests Chapter Reviews Slate Assessment

	<u>Standards/Goals</u>	<u>Instructional Tools</u>	<u>Assessment Tools</u>
	<ul style="list-style-type: none"> <li>division problems</li> <li>c. Students will use the “trade first” method to solve two digit subtraction problems</li> <li>d. Make ballpark estimates of exact numbers</li> <li>e. Model multiplication problems with arrays</li> <li>f. Add three 2- digit numbers mentally</li> </ul>	<ul style="list-style-type: none"> <li>Fact triangles</li> <li>Dice</li> </ul>	<ul style="list-style-type: none"> <li>Math Boxes</li> <li>Unit Assessment</li> <li>Teacher Observations</li> </ul>
<b>Unit 7 Patterns and Rules</b>	<ul style="list-style-type: none"> <li>a. Students will extend and explore visual patterns</li> <li>b. Identify and use patterns on a number grid</li> <li>c. Find equivalent names for numbers</li> <li>d. Explore patterns in doubling numbers</li> <li>e. Count by two’s, five’s and ten’s</li> <li>f. Write/solve addition and subtraction number sentences</li> </ul>	<ul style="list-style-type: none"> <li>Slates</li> <li>Number cards decks</li> <li>Student journals</li> </ul>	<ul style="list-style-type: none"> <li>Home links worksheets</li> <li>Student Journals</li> <li>Tests</li> <li>Chapter Reviews</li> <li>Slate Assessment</li> <li>Math Boxes</li> <li>Unit Assessment</li> <li>Teacher Observations</li> </ul>
<b>Unit 8 Fractions</b>	<ul style="list-style-type: none"> <li>a. Students will understand the meaning of fractions</li> <li>b. Identify numerator and denominator</li> <li>c. Shade and identify fractional parts of a region and a set</li> <li>d. Students will find equivalent fractions</li> <li>e. Understand that the amount represented by a fraction depends on the size of the whole</li> </ul>	<ul style="list-style-type: none"> <li>Slates</li> <li>Number cards decks</li> <li>Student journals</li> </ul>	<ul style="list-style-type: none"> <li>Home links worksheets</li> <li>Student Journals</li> <li>Tests</li> <li>Chapter Reviews</li> <li>Slate Assessment</li> <li>Math Boxes</li> <li>Unit Assessment</li> <li>Teacher Observations</li> </ul>
<b>Unit 9 Measurement</b>	<ul style="list-style-type: none"> <li>a. Students will measure to the nearest centimeter and inch</li> </ul>	<ul style="list-style-type: none"> <li>Slates</li> <li>Number cards decks</li> </ul>	<ul style="list-style-type: none"> <li>Home links worksheets</li> <li>Student Journals</li> </ul>

	<u>Standards/Goals</u>	<u>Instructional Tools</u>	<u>Assessment Tools</u>
	<ul style="list-style-type: none"> <li>b. Identify equivalent customary units of capacity</li> <li>c. Name tools used to measure capacity</li> <li>d. Solve weight number stories</li> <li>e. Identify metric units of weight</li> </ul>	<ul style="list-style-type: none"> <li>Student journals</li> <li>Ruler</li> </ul>	<ul style="list-style-type: none"> <li>Tests</li> <li>Chapter Reviews</li> <li>Slate Assessment</li> <li>Math Boxes</li> <li>Unit Assessment</li> <li>Teacher Observations</li> </ul>
<b>Unit 10 Decimals and Place Value</b>	<ul style="list-style-type: none"> <li>a. Students will use dollars and cents notation</li> <li>b. Use the calculator to compute money amounts</li> <li>c. Identify equivalences and make coin exchanges</li> <li>d. Show money amounts with coins and bills</li> </ul>	<ul style="list-style-type: none"> <li>Slates</li> <li>Number cards decks</li> <li>Student journals</li> </ul>	<ul style="list-style-type: none"> <li>Home links worksheets</li> <li>Student Journals</li> <li>Tests</li> <li>Chapter Reviews</li> <li>Slate Assessment</li> <li>Math Boxes</li> <li>Unit Assessment</li> <li>Teacher Observations</li> </ul>
<b>Unit 11 Whole-Number Operations Revisited</b>	<ul style="list-style-type: none"> <li>a. Students will perform rational counting</li> <li>b. Identify place value in four digit numbers</li> <li>c.</li> </ul>	<ul style="list-style-type: none"> <li>Slates</li> <li>Number cards decks</li> <li>Student journals</li> </ul>	<ul style="list-style-type: none"> <li>Home links worksheets</li> <li>Student Journals</li> <li>Tests</li> <li>Chapter Reviews</li> <li>Slate Assessment</li> <li>Math Boxes</li> <li>Unit Assessment</li> <li>Teacher Observations</li> </ul>
<b>Unit 12 Year-End Reviews</b>	<ul style="list-style-type: none"> <li>a.</li> </ul>	<ul style="list-style-type: none"> <li>Slates</li> <li>Number cards decks</li> <li>Student journals</li> </ul>	<ul style="list-style-type: none"> <li>Home links worksheets</li> <li>Student Journals</li> <li>Tests</li> <li>Chapter Reviews</li> <li>Slate Assessment</li> <li>Math Boxes</li> <li>Unit Assessment</li> <li>Teacher Observations</li> </ul>