

## My Child's Learning - A Family Resource Grade 4 Mathematics - At A Glance

Organizing Idea	Grade 4 Learning Outcome	Highlights of your Child's Learning (by the end of Grade 4)
<b>Number</b>	Children investigate decimal numbers.	<ul style="list-style-type: none"> <li>● Write and say decimal numbers (Example 4.36)</li> <li>● Round numbers to various places, including tenths (Example, 4.7 rounds to 5)</li> <li>● Compare and order numbers, including decimal numbers</li> <li>● Express money in cents and dollars</li> </ul>
	Students add and subtract within 10 000, including decimal numbers to hundredths.	<ul style="list-style-type: none"> <li>● Add and subtract numbers, including decimal numbers, using standard algorithms, based on place value.</li> <li>● Estimation can be used to check the reasonableness of a sum or difference.</li> <li>● Solve problems using addition and subtraction, including problems involving money.</li> </ul>
	Students explain properties of prime and composite numbers using multiplication and division.	<ul style="list-style-type: none"> <li>● Determine the factors of a number within 100.</li> <li>● Describe a number as prime or composite.</li> <li>● Determine the first five multiples of a given number within 100.</li> <li>● Recognize the greatest common factor (greatest common divisor) of two numbers within 100.</li> </ul>
	Students multiply and divide natural numbers within 10 000.	<ul style="list-style-type: none"> <li>● Multiply and divide larger numbers using known multiplication and division facts of smaller numbers.</li> <li>● Choose the multiplication or division strategy based on the numbers involved.</li> <li>● Understand that the standard algorithm can be used to multiply and divide larger numbers.</li> </ul>
	Students apply equivalence to the interpretation of fractions.	<ul style="list-style-type: none"> <li>● Show that equivalent fractions represent the same point on a number line.</li> <li>● Simplify a given fraction by dividing the numerator and denominator by a common factor.</li> <li>● Show that a fraction and the equivalent decimal number are on the same point on a number line.</li> <li>● Convert fractions to decimals and decimals to fractions.</li> </ul>
	Students interpret percentages.	<ul style="list-style-type: none"> <li>● Express the fraction, decimal, and percentage representations of the same relationship.</li> <li>● Investigate percentage in familiar situations.</li> </ul>

<b>Algebra</b>	Students visualize and apply equality in multiple ways.	<ul style="list-style-type: none"> <li>● Evaluate expressions following order of operations</li> <li>● Solve an equation by determining an unknown value that makes the left and right sides of an equation equal.</li> </ul>
<b>Geometry</b>	Students interpret and explain geometric properties.	<ul style="list-style-type: none"> <li>● Classify triangles according to side length and angles</li> <li>● Classify quadrilaterals according to appropriate properties</li> <li>● Determine if the side lengths and angle measures of one shape are the same as a second shape by reflecting, rotating or sliding one of the shapes.</li> </ul>
<b>Measurement</b>	Students interpret and express area.	<ul style="list-style-type: none"> <li>● Understand that area is the amount of space inside a closed shape.</li> <li>● Measure area with non-standard units or standard units.</li> <li>● Determine area of a rectangle.</li> </ul>
<b>Patterns</b>	Students interpret and explain arithmetic and geometric sequences.	<ul style="list-style-type: none"> <li>● Create and explain increasing or decreasing sequences</li> </ul>
<b>Time</b>	Students communicate duration with standard units of time.	<ul style="list-style-type: none"> <li>● Relate durations of 15 minutes, 20 minutes, 30 minutes, 40 minutes, and 45 minutes to fractions of a circle. <ul style="list-style-type: none"> <li>○ Apply addition and subtraction to the calculation of duration.</li> <li>○ Convert between hours, minutes, and seconds</li> </ul> </li> </ul>
<b>Statistics</b>	Students evaluate the use of scale in graphical representations of data.	<ul style="list-style-type: none"> <li>● Formulating statistical questions</li> <li>● Collecting data</li> <li>● Representing data</li> <li>● Interpreting data</li> </ul>

For additional resources to support your math learner:

[Doing Mathematics with Your Child, Kindergarten to Grade 6, A Parent Guide](#)

[Helping Your Child Learn Math: A Parent's Guide](#)