MATHEMATICS – *Number Sense and Numeration*		
Grade 1 read, represent, compare, and order whole numbers to 50, and use concrete materials to investigate fractions and money amounts. **Grade 2** read, represent, compare, and order whole numbers to 100, and use concrete materials to represent fractions and money amounts to 100 c. **Grade 3** read, represent, compare, and order whole numbers to 1000, and use concrete materials to represent fractions and money amounts to $10.	Using *[specific tools, such as blocks, cubes or other manipulatives], [Name]* can represent, compare and order numbers to *[specific number, such as 50, 100, 1000]*. *W*ith pattern blocks *[or other manipulatives] [Name]* is able to show simple fractions (such as half, whole, etc.). *[Name]* is able to identify coins and state their value. For example, *[specific evidence, such as during our daily count of days of school represented in money].*	*[Name]* needs to work on developing *[his/her]* number sense. Working with concrete materials such as cubes or blocks, *[Name]* should practice counting, comparing and representing numbers. *[Name]* is beginning to identify and describe coins. At home, *[Name]* should use real coins such as pennies, nickels and dimes, to practice stating their value and names.
Grade 4 read, represent, compare, and order whole numbers to 10 000, decimal numbers to tenths, and simple fractions, and represent money amounts to $100. **Grade 5** read, represent, compare, and order whole numbers to 100 000, decimal numbers to hundredths, proper and improper fractions, and mixed numbers. **Grade 6** read, represent, compare, and order whole numbers to 1 000 000, decimal numbers to thousandths, proper and improper fractions, and mixed numbers.	Using base ten materials *[or other tools]*, *[Name]* shows that he understands whole numbers, decimal numbers, and simple fractions. Using *[specific tools]*, *[Name]* shows understanding of place value in whole numbers and decimal numbers.	*[Name]* could improve *[his/her]* understanding of fractions and decimals by identifying objects that are made up of sub-components (e.g., a keypad, a puzzle) and representing the sub-components in the form of a fraction and a decimal number.
Grade 7 represent, compare, and order numbers, including integers.	When *[specific task, such as given a set of numbers where the numbers are decimals larger than 10 000], [Name]* can correctly represent, compare and order these numbers.	At home or out shopping, when a set of numbers is encountered (e.g., prices of five different products), *[Name]* is encouraged to state the order of those numbers from least to greatest to help improve *[his/her]* understanding of the quantities represented by large numbers.

Grade 8 represent, compare, and order equivalent representations of numbers, including those involving positive exponents.	When *[specific task, such as given a set of numbers where the numbers are fractions, decimals, larger than 10 000, integers, positive exponents], [Name]* can correctly represent, compare and order these numbers.	At home, ask *[Name]* to represent numbers on a number line to help *[him/her]* become more comfortable in representing large numbers. At home, when positive and/or negative fractions come up in a book, magazine, newspaper or on television, ask *[Name]* to order those fractions from least to greatest to help *[him/her]* become more comfortable in understanding what fractions represent.
Grade 1 demonstrate an understanding of magnitude by counting forward to 100 and backwards from 20. **Grade 2** demonstrate an understanding of magnitude by counting forward to 200 and backwards from 50, using multiples of various numbers as starting points. **Grade 3** demonstrate an understanding of magnitude by counting forward and backwards by various numbers and from various starting points.	*[Name]* has a sound understanding of quantity and can count forward to 100 *[or beyond]* and is able to count backwards from 20 *[or beyond]*. *[Name]* has a good understanding of quantity and is able to count forward to 200 *[or beyond]* and backwards from 50 *[or beyond]. [He/She]* can do this starting from various numbers.	*[Name]* needs to work on *[his/her]* understanding of number and continues to learn to count forwards to 100 and backwards from 20. At home, *[Name]* should practice counting, using a number chart, if necessary.
Grade 4 demonstrate an understanding of magnitude by counting forward and backwards by 0.1 and by fractional amounts. **Grade 5** demonstrate an understanding of magnitude by counting forward and backwards by 0.01.	*[Name]* successfully counts forward using fractions and decimal numbers on a number line.	At home, *[Name]* could practice using a standard ruler to measure small objects and describe their dimensions using fractions and decimals. *[Name]* needs more practice counting forward by hundredths (e.g., 2.96, 2.97, 2.98, etc.).
Grade 1 solve problems involving the addition and subtraction of single-digit whole numbers, using a variety of strategies. **Grade 2**	*[Name]* is able to solve math problems by adding and subtracting single-digit numbers. *[He/she]* has demonstrated this ability by adding and subtracting *[specific example, such as counting bears during class].*	*[Name]* is encouraged to work on solving one-digit addition and subtraction problems. Further practice using strategies such as counting on or using concrete materials will help *[him/her]* improve this skill.

solve problems involving the addition and subtraction of one- and two-digit whole numbers, using a variety of strategies, and investigate multiplication and division. **Grade 3** solve problems involving the addition and subtraction of single- and multi-digit whole numbers, using a variety of strategies, and demonstrate an understanding of multiplication and division.	*[Name]* is able to solve addition and subtraction problems of both one-digit and two-digit numbers. *[He/She]* uses strategies learned in class, such as *[specific example, such as counting on, using doubles and fact-families].* *[Name]* has developed a firm understanding of multiplication and division, as demonstrated in *[his/her]* explanations in *[his/her]* math journal *[or other example, such as written work, oral explanation].*	*[Name]* requires support to solve addition and subtraction problems using one or more digit numbers. In order to assist *[Name]* in being able to independently master this skill, *[he/she]* needs to use strategies such as using doubles, or working with concrete materials. *[Name]* is beginning to develop an understanding of multiplication and division. To further help *[Name]* understand this concept *[he/she]* could practice sorting and counting groups of numbers or objects at home.
Grade 4 solve problems involving the addition, subtraction, multiplication, and division of single- and multi-digit whole numbers, and involving the addition and subtraction of decimal numbers to tenths and money amounts, using a variety of strategies. **Grade 5** solve problems involving the multiplication and division of multi-digit whole numbers, and involving the addition and subtraction of decimal numbers to hundredths, using a variety of strategies. **Grade 6** solve problems involving the multiplication and division of whole numbers, and the addition and subtraction of decimal numbers to thousandths, using a variety of strategies.	*[Name]* can solve problems involving addition and subtraction by using a variety of strategies. *[Name]* can solve problems involving addition, subtraction and multiplication of whole numbers by using a variety of strategies. *[Name]* can solve problems involving addition, subtraction, multiplication and division (of whole numbers) by using a variety of strategies and tools.	*[Name]* could use a store flyer at home to practice making purchases from a set amount of money (without involving taxes). (For example, "If I gave you $30.00, what could you buy us for supper from this store? Show me how you know we could buy all this.")
Grade 7 demonstrate an understanding of addition and subtraction of fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers.	*[Name]* added and subtracted fractions *[specific evidence, such as in daily class work, using concrete materials, on weekly assessments]*. *[Name]* added and subtracted integers *[specific evidence, such as in daily class work, using concrete materials, on weekly assessments]*.	*[Name]* needs extra practice working with *[specific task, such as addition and subtraction of fractions or integers, or solving problems involving whole numbers and decimal numbers].* Taking home a question to work on each night may help with *[his/her]* retention of the concepts.

Grade 8 solve problems involving whole numbers, decimal numbers, fractions, and integers, using a variety of computational strategies.	*[Name]* used various computational strategies (e.g., using a calculator, devising a formula, use of the commutative property) in *[his/her]* daily class work to solve problems involving whole numbers and decimal numbers. *[Name]* used various computational strategies (e.g., use of a calculator, estimation, development of a formula) in *[his/her]* daily class work and assessments to solve problems involving *[specific task, such s whole numbers, decimal numbers, fractions, integers].*	*[Name]* needs extra practice working with *[specific task, such as solving problems involving whole numbers, decimal numbers, fractions, or integers].* Taking home a question each night to work on may help with *[his/her]* retention of the concepts.
Grade 4 demonstrate an understanding of proportional reasoning by investigating whole-number unit rates. **Grade 5** demonstrate an understanding of proportional reasoning by investigating whole-number rates. **Grade 6** demonstrate an understanding of relationships involving percent, ratio, and unit rate.	*[Name]* understands the relationship between fractions and decimals, which *[he/she]* has demonstrated by using drawings and concrete materials to represent *[his/her]* thinking. *[Name]* can represent ratios found in real-life contexts, using *[specific tools, such as concrete materials, drawings, standard fractional notation].*	To improve *[his/her]* understanding of the relationship between fractions and decimals, *[Name]* is encouraged to practice representing simple fractions using concrete materials (such as Lego), then describing the quantity in the form of a decimal number. *[Name]* needs to continue developing *[his/her]* understanding of the relationship between quantities represented as fractions and decimals. *[Name]* needs to continue developing *[his/her]* understanding of the relationship between quantities represented as percents and ratios.
Grade 7 demonstrate an understanding of proportional relationships using percent, ratio, and rate. **Grade 8**	When *[specific task, such as given a scenario such as having 5 blue marbles in a bag of 20 marbles], [Name]* determined the percent of *[specific task, such as marbles that are not blue].* This shows *[his/her]* understanding of proportional reasoning using percent. *[He/she]* also demonstrated proportional understanding	*[Name]* would benefit from using web-based tools, such as CLIPS and Gizmos, to improve *[his/her]* understanding of percent, ratio and rate.

solve problems by using proportional reasoning in a variety of meaningful contexts.	using ratio and rate by solving various problems. Solving problems with real meaning (e.g., recipes, tax calculations, the stone-to-sand ratio in concrete), *[Name]* successfully applied proportional reasoning.	