Performance Level Descriptors – Grade 2 Mathematics

PLD	Domain	Below Basic	Basic	Proficient	Advanced
Reporting		**Below Basic do not yet demonstrate proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in content expectations. The students need substantial academic support to be prepared for the next grade level or course and to be on track for *college and career readiness.*	**Basic demonstrate partial proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in content expectations. The students need additional academic support to ensure success in the next grade level or course and to be on track for *college and career readiness.*	**Proficient demonstrate proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in content expectations, and uses clear and precise language when communicating mathematical understanding. The students are prepared for the next grade level or course and are on track for *college and career readiness.*	**Advanced demonstrate advanced proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in content expectations. The students are well prepared for the next grade level or course and are well prepared for *college and career readiness.*
		A student who performs at the **Below Basic** level demonstrates minimal command of the grade-level expectations.	A student who performs at the **Basic** level demonstrates partial command of the grade-level expectations.	A student who performs at the **Proficient** level demonstrates proficiency of the grade-level expectations.	A student who performs at the **Advanced** level demonstrates advanced proficiency of the grade-level expectations.

Range	**Number and Operations In Base Ten**	Counts verbally by 1s starting with any number within 1000; adds and subtracts numbers to 100 without regrouping; understands two-digit numbers are composed of tens and ones	Reads and writes numbers to 1000 using number names and base ten numerals; counts on within 1000 by 1s and 10s starting with any number; adds and subtracts numbers to 100 using strategies based on place value; adds and subtracts without regrouping to 1000; compares two 3-digit numbers based on the understanding of place value; determines how many hundreds, tens and ones comprise a three-digit number	Identifies and models numbers to 1000 using place value and expanded form; uses the structure of numbers to count on from any number within 1000; demonstrates fluency of addition and subtraction within 100 using strategies based on place value, properties of operations and/or the relationship between addition and subtraction; adds and subtracts within 1000, justifying the solution; writes and solves problems involving addition and subtraction within 100; adds up to four two-digit numbers; compares two three-digit numbers using >, < or =; mentally adds/subtracts 10 or 100 to/from a given number within 1000	Understands and explains the place value of three-digit numbers (i.e. recognizes that 247 could be thought of in multiple ways: 2 hundreds 4 tens 7 ones *or* 24 tens 7 ones *or* 1 hundred 14 tens 7 ones;) construct viable arguments when comparing two three-digit numbers; fluently adds and subtracts to solve problems and critiques the solutions of their peers
	Relationships and Algebraic Thinking	Adds and subtracts within 10; counts by 2s within 20; when given a set number of paired concrete objects on a ten-frame, identifies whether the total is odd or even; counts the total number of objects arranged in a rectangular array made of concrete objects	Adds and subtracts within 20; counts by 2s within 100 beginning with two; creates one-to-one correspondence of objects to determine pairs; counts the total number of objects arranged in a rectangular array, using concrete or pictorial models	Adds and subtracts fluently within 20; counts by 2s to 100 starting with any given even number; writes an expression to represent an even number using pairings/groups of 2 (i.e. 8 can be represented as 2 + 2 + 2 + 2); identifies numbers as odd or even; recognizes even numbers as being composed of two equal groups; writes an equation for a rectangular array of up to 5 rows and 5 columns; explains their thinking	Extends fluency with addition and subtraction to numbers beyond 20; constructs viable arguments and critiques the reasoning of others when determining whether a number is odd or even

Range	**Geometry and Measurement**	Draws and identifies 2-D shapes (triangles, circles, squares, rectangles); selects tools for measurement; measures with non-standard units; measures and compares the length of objects; tells and writes time to the hour and half hour; knows the value of a penny, nickel, dime and quarter; creates a rectangle to model rows and columns using manipulatives (i.e., color square tiles)	Draws 2-D shapes with specified attributes; identifies some but not all of the following shapes: triangles, quadrilaterals, pentagons, hexagons, circles and cubes; counts the total number of objects arranged in a rectangular array, using concrete and pictorial models; partitions circles and rectangles into two, three and four equal shares; measures and compares the length of objects using the appropriate tool; use addition and subtraction within 100 to solve measurement problems involving length; represent whole numbers on a number line; tells and writes time to the nearest 15 minutes; reads a digital clock; adds a combination of coins to find a given amount	Understands and explains that 2-D faces make up 3-D shapes; partitions circles and rectangles into two, three or four equal shares and describes the whole in relationship to the parts; demonstrates that equal shares of identical wholes need not be identical; chooses appropriate tools for precise measurement based on the object and attribute being measured; analyzes the results of measuring when using different units and recognizes the smaller the unit, the more total units *or* the larger the unit, the fewer total units; estimate lengths in standard or metric unit measures; solve word problems that involve measuring within the same length unit; represent sums and differences using a single number line to represent lengths; reads and compares analog and digital clocks to the nearest five minutes; uses a.m. and p.m. correctly; finds the value of a combination of dollars and coins and records the total using $ and ¢ correctly	Understands and explains the need for precision when measuring; uses estimation to determine when measurements are accurate; creates and solves word problems involving measurement when the same unit is given; accurately reads time from any clock extends their understanding of arrays to early multiplication

Data and Statistics	Works with others to generate a line plot when using a horizontal scale marked in whole numbers; uses concrete objects to model; draws a picture or bar graph with two categories to represent the graph they have modeled; uses information on picture graphs to solve problems; Recognizes the appropriate line plot or frequency table that represents a set of given data. Compare quantities in a bar or picture graph.	Generates measurement data; Creates a line plot to represent measurement data; draws a picture or bar graph to represent data with up to three categories; uses information presented in picture graphs or bar graphs to solve problems and draw conclusions Creates line plot or frequency table to represent data in whole-number units. Solves problems involving addition and subtraction using bar or picture graphs.	Creates a line plot to represent a numerical data set; is precise when constructing line plots, picture graphs and bar graphs; draws a picture graph or bar graph to represent a data set with up to four categories; solves problems and draws conclusions using information presented in line plots, picture graphs or bar graphs; justifies their thinking and communicates their ideas to others; reasons abstractly and quantitatively to analyze data in multiple representations Creates line plots and frequency tables to represent measurement data; solves addition and subtraction problems involving interpretation of data	Collects and categorizes their own data and creates a line plot to represent data on a horizontal scale; creates picture graphs in which the picture represents more than 1 or bar graphs with intervals greater than 1; draws graphs to represent data of four categories or more; interprets the information presented in picture graphs, bar graphs or line plots; explains conclusions drawn from graphs and justifies their thinking; critiques the reasoning of others when representing and using data to make decisions