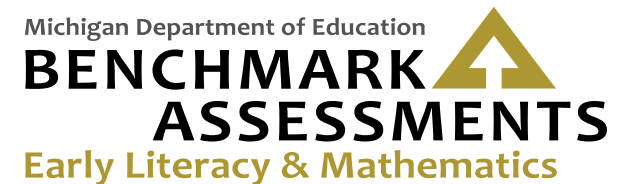




MATHEMATICS

Performance Level Descriptors Grade 2



Range Performance Level Descriptors			
Standard	Needs Support	Demonstrates Proficiency	Demonstrates Mastery
	The student's performance is not yet proficient and indicates a minimal or partial understanding and application of key academic content standards defined for Michigan students. The student needs intervention and support to improve achievement.	The student's performance indicates understanding and application of key academic content standards defined for Michigan students. The student needs continued support to maintain and improve proficiency.	The student's performance exceeds academic content standards and indicates substantial understanding and application of key concepts defined for Michigan students. The student needs support to continue to excel.
Operations and Algebraic Thinking			
	A student at this level	A student at this level	A student at this level
2.OA.1	<ul style="list-style-type: none"> uses addition or subtraction to solve one-step word problems that are represented with drawings or equations. 	<ul style="list-style-type: none"> uses addition and subtraction within 100 to solve one- and two-step word problems by representing the problems with drawings or equations. 	<ul style="list-style-type: none"> uses addition and subtraction within 100 to solve two-step word problems involving a variety of situations and representations and creates a context for a given addition or subtraction equation with an unknown.
2.OA.2	<ul style="list-style-type: none"> adds and subtracts within 20. 	<ul style="list-style-type: none"> fluently adds and subtracts within 20 using mental strategies. 	<ul style="list-style-type: none"> fluently adds and subtracts within 20 using only mental strategies and knows from memory all sums of two one-digit numbers.
2.OA.3	<ul style="list-style-type: none"> knows that even numbers of objects can be paired. 	<ul style="list-style-type: none"> determines whether a group of up to 20 objects is an odd or even amount. 	<ul style="list-style-type: none"> writes equations to express all even numbers up to 20 as a sum of two equal addends.
2.OA.4	<ul style="list-style-type: none"> counts to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. 	<ul style="list-style-type: none"> uses addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. 	<ul style="list-style-type: none"> represents rectangular arrays as sums of equal addends, recognizing that every non-square array has at least two such sums (one in which each addend is the number of objects in each row and the other in which each addend is the number of objects in each column).

Number and Operations in Base Ten

	A student at this level	A student at this level	A student at this level
2.NBT.1	<ul style="list-style-type: none"> understands that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. 	<ul style="list-style-type: none"> understands the place values of three-digit numbers, thinks of a hundred as a bundle of ten tens, and describes numbers such as 400 as having zero tens and zero ones. 	<ul style="list-style-type: none"> uses place value equivalencies to describe single values in multiple ways (e.g., describes 325 as “3 hundreds, 2 tens, and 5 ones,” “32 tens and 5 ones,” “325 ones,” or “2 hundreds, 12 tens, and 5 ones”).
2.NBT.2	<ul style="list-style-type: none"> counts within 1000 and skip-counts by 100s. 	<ul style="list-style-type: none"> skip-counts by 5s, 10s, and 100s. 	<ul style="list-style-type: none"> skip-counts by 2s and fluently skip-counts by 5s, 10s, and 100s.
2.NBT.3	<ul style="list-style-type: none"> reads and writes numbers to 1000. 	<ul style="list-style-type: none"> reads and writes numbers to 1000 using base-ten numerals, number names, and expanded form. 	<ul style="list-style-type: none"> freely translates among the various written representations for numbers to 1000.
2.NBT.4	<ul style="list-style-type: none"> compares two three-digit numbers that are represented with models. 	<ul style="list-style-type: none"> compares two three-digit numbers based on place value and records the comparisons using $>$, $=$, and $<$ symbols. 	<ul style="list-style-type: none"> represents comparisons of two three-digit numbers both symbolically and verbally by using appropriate comparative language and orders three or more three-digit numbers from least to greatest or greatest to least.
2.NBT.5	<ul style="list-style-type: none"> adds and subtracts within 100. 	<ul style="list-style-type: none"> fluently adds and subtracts within 100. 	<ul style="list-style-type: none"> fluently adds and subtracts within 100 using strategies based on place value and properties of operations.
2.NBT.6	<ul style="list-style-type: none"> adds up to three two-digit numbers. 	<ul style="list-style-type: none"> adds up to four two-digit numbers using strategies based on place value. 	<ul style="list-style-type: none"> adds three or more two- and three-digit numbers using strategies based on place value and properties of operations.
2.NBT.7	<ul style="list-style-type: none"> understands that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, and ones and ones. 	<ul style="list-style-type: none"> adds and subtracts within 1000. 	<ul style="list-style-type: none"> adds and subtracts within 1000 using a variety of strategies and relates the strategies to written methods.

Measurement and Data

	A student at this level	A student at this level	A student at this level
2.MD.1	<ul style="list-style-type: none"> identifies tools for measuring length such as rulers, yardsticks, meter sticks, and measuring tapes. 	<ul style="list-style-type: none"> measures the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 	<ul style="list-style-type: none"> strategically selects and uses tools for measuring lengths and explains why one tool may be more or less appropriate than another.
2.MD.2	<ul style="list-style-type: none"> measures the length of an object using a given length unit. 	<ul style="list-style-type: none"> measures the length of an object twice, using length units of different lengths for the two measurements. 	<ul style="list-style-type: none"> measures objects multiple times using length units of different lengths and describes how the measurements relate to the size of the units used.
2.MD.3	<ul style="list-style-type: none"> estimates a length in a given measurement unit when provided with a visual model of that unit. 	<ul style="list-style-type: none"> estimates lengths using units of inches, feet, centimeters, and meters. 	<ul style="list-style-type: none"> estimates identical lengths using different units.
2.MD.4	<ul style="list-style-type: none"> measures two objects to determine which one is longer. 	<ul style="list-style-type: none"> measures to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. 	<ul style="list-style-type: none"> measures to compare the lengths of more than two objects, expressing the length differences in terms of length units.
2.MD.5	<ul style="list-style-type: none"> uses addition or subtraction within 100 to solve simple modeled problems involving lengths that are given in the same units. 	<ul style="list-style-type: none"> uses addition and subtraction within 100 to solve one-step word problems involving lengths that are given in the same units. 	<ul style="list-style-type: none"> uses addition and subtraction within 100 to solve two-step word problems involving lengths that are given in the same units.
2.MD.6	<ul style="list-style-type: none"> identifies whole numbers on a number line diagram. 	<ul style="list-style-type: none"> represents whole numbers as lengths from zero on a number line diagram and represents one-step sums and differences within 100 on a number line diagram. 	<ul style="list-style-type: none"> represents two-step sums and differences within 100 on a number line diagram.
2.MD.7	<ul style="list-style-type: none"> tells and writes time from digital clocks to the nearest five minutes. 	<ul style="list-style-type: none"> tells and writes time from analog and digital clocks to the nearest five minutes using a.m. and p.m. 	<ul style="list-style-type: none"> draws hands on an analog clock to represent times to the nearest five minutes.

2.MD.8	<ul style="list-style-type: none"> identifies dollar bills, quarters, dimes, nickels, and pennies and knows the value of each. 	<ul style="list-style-type: none"> solves one-step word problems involving small collections of dollar bills, quarters, dimes, nickels, and pennies using \$ and ¢ symbols appropriately. 	<ul style="list-style-type: none"> solves one- and two-step word problems involving larger collections of dollar bills, quarters, dimes, nickels, and pennies.
2.MD.9	<ul style="list-style-type: none"> generates measurement data by measuring lengths of several objects to the nearest whole unit and interprets line plots that display simple measurement data. 	<ul style="list-style-type: none"> generates measurement data by measuring lengths of several objects to the nearest whole unit or by making repeated measurements of the same object and transfers data to pre-labeled line plot diagrams with whole-number scales. 	<ul style="list-style-type: none"> displays measurement data by creating line plots, choosing labels and scales appropriately.
2.MD.10	<ul style="list-style-type: none"> interprets picture graphs and bar graphs with single-unit scales. 	<ul style="list-style-type: none"> draws picture graphs and bar graphs with single-unit scales to represent data sets with up to four categories and uses information presented in bar graphs to solve simple put-together, take-apart, or compare problems. 	<ul style="list-style-type: none"> analyzes information presented in bar graphs to solve a variety of one- and two-step problems.

Geometry

2.G.1	<p>A student at this level</p> <ul style="list-style-type: none"> identifies triangles, quadrilaterals, pentagons, hexagons, and cubes. 	<p>A student at this level</p> <ul style="list-style-type: none"> recognizes and draws shapes with specified attributes. 	<p>A student at this level</p> <ul style="list-style-type: none"> describes a variety of shapes based on their attributes.
2.G.2	<ul style="list-style-type: none"> counts to find the total number of squares in a rectangle partitioned into same-size squares. 	<ul style="list-style-type: none"> partitions a rectangle into rows and columns of same-size squares and counts to find the total number of them. 	<ul style="list-style-type: none"> partitions rectangles into same-size squares and uses repeated addition to find the total number of squares.
2.G.3	<ul style="list-style-type: none"> partitions circles and rectangles into two or four equal shares and describes the shares using appropriate fraction terminology. 	<ul style="list-style-type: none"> partitions circles and rectangles into two, three, or four equal shares, describes the shares using appropriate fraction terminology, describes the whole as the total number of equal shares, and recognizes that equal shares of identical wholes need not have the same shape. 	<ul style="list-style-type: none"> draws examples of equal shares of identical wholes that have different shapes.