

## MATHEMATICS

Performance Level Descriptors Kindergarten



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.	
Counting a	and Cardinality			
K.CC.1	<ul> <li>A student at this level</li> <li>counts to 30 by ones.</li> </ul>	<ul> <li>A student at this level</li> <li>counts to 100 by ones and by tens.</li> </ul>	<ul> <li>A student at this level</li> <li>counts backward from 10 by ones and backward from 100 by tens.</li> </ul>	
K.CC.2	<ul> <li>counts forward by ones beginning from any given number within a known sequence from 1–30.</li> </ul>	<ul> <li>counts forward by ones beginning from any given number within a known sequence from 1–100.</li> </ul>	<ul> <li>counts forward by ones and by tens beginning from any given number within a known sequence from 1–100.</li> </ul>	
K.CC.4	<ul> <li>understands the relationship between numbers and quantities and when counting objects, properly pairs objects and number names up to 10.</li> </ul>	<ul> <li>connects counting to cardinality and when counting objects, properly pairs objects and number names and understands that the last number name said tells the number of objects counted, regardless of the order of the count.</li> </ul>	<ul> <li>properly utilizes counting as a strategy to identify quantities and understands that each successive number name refers to a quantity that is one larger.</li> </ul>	
K.CC.5 K.CC.6	<ul> <li>counts 10 objects arranged in a line and counts out a given number of objects from 1–10.</li> </ul>	<ul> <li>counts the number of objects in organized groups of up to 20 objects and in scattered configurations of up to 10 objects and counts out a given number of objects from 1–20.</li> </ul>	<ul> <li>efficiently counts the number of objects in organized and scattered configurations of up to 20 objects or more.</li> </ul>	
	<ul> <li>for groups of up to 5 objects, identifies whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group by using straightforward counting strategies.</li> </ul>	<ul> <li>for groups of up to 10 objects, identifies whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group by using matching or counting strategies.</li> </ul>	<ul> <li>identifies whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group by using a variety of matching and counting strategies.</li> </ul>	

Kindergarten Math Michigan Early Literacy & Mathematics Benchmark Assessments							
K.CC.7	<ul> <li>compares two consecutive numbers from 1–10 presented as written numerals.</li> </ul>	<ul> <li>compares any two numbers from 1–10 presented as written numerals.</li> </ul>	<ul> <li>compares any two numbers from 1–20 presented as written numerals and describes the comparison in two different ways (e.g., expresses that 7 is fewer than 9 and that 9 is more than 7).</li> </ul>				
Operation	Operations and Algebraic Thinking						
	A student at this level	A student at this level	A student at this level				
K.OA.1	<ul> <li>represents addition and subtraction with objects or fingers.</li> </ul>	<ul> <li>represents addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, or verbal explanations and connects the symbols + and – to addition and subtraction, respectively.</li> </ul>	<ul> <li>represents given addition and subtraction problems in a variety of ways, including as numerical expressions and equations.</li> </ul>				
K.OA.2	<ul> <li>adds and subtracts within 5 to solve word problems that are represented with objects or drawings.</li> </ul>	<ul> <li>represents addition and subtraction word problems with objects or drawings and adds and subtracts within 10 to solve the problems.</li> </ul>	<ul> <li>represents and solves addition and subtraction word problems using drawings and equations.</li> </ul>				
K.OA.3	<ul> <li>identifies one or two paired decompositions of 10 that are represented with visual models.</li> </ul>	<ul> <li>decomposes numbers up to 10 into pairs in more than one way.</li> </ul>	<ul> <li>decomposes numbers up to 10 in a variety of ways and records the decompositions with equations.</li> </ul>				
K.OA.4	<ul> <li>counts out the number of objects that makes 10 when added to a given number of objects from 1–9.</li> </ul>	<ul> <li>finds the number that makes 10 when added to a given number from 1–9.</li> </ul>	<ul> <li>finds the numeral that makes up to 10 when added to a given numeral from 0–10 and records the answer with an equation.</li> </ul>				
Number and Operations in Base Ten							
	A student at this level	A student at this level	A student at this level				
K.NBT.1	<ul> <li>understands the numbers 11–19 are composed of ten ones and between one and nine additional ones.</li> </ul>	<ul> <li>composes and decomposes numbers from 11–19 into ten ones and some more ones by using objects or drawings.</li> </ul>	<ul> <li>composes and decomposes numbers from 11–19 and records the compositions and decompositions as addition and subtraction equations.</li> </ul>				

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Measurement and Data				
	A student at this level	A student at this level	A student at this level	
K.MD.1	<ul> <li>recognizes length and weight as measurable attributes.</li> </ul>	<ul> <li>describes measurable attributes of objects, such as length or weight and describes several measurable attributes of a single object.</li> </ul>	<ul> <li>compares measurable attributes of two or more objects.</li> </ul>	
K.MD.2	<ul> <li>directly compares the lengths of two concrete objects to identify which object is longer.</li> </ul>	<ul> <li>directly compares two objects with a measurable attribute in common to see which object has "more of" or "less of" the attribute and describes the difference using appropriate comparative language.</li> </ul>	<ul> <li>directly compares two objects with a measurable attribute in common and describes the comparison in two different ways (e.g., if object A has more of the attribute than object B, then object B has less of the attribute than object A).</li> </ul>	
K.MD.3	<ul> <li>classifies objects into two given categories and counts the number of objects in each category.</li> </ul>	<ul> <li>classifies objects into given categories and sorts the categories by count.</li> </ul>	<ul> <li>classifies objects into created categories and uses descriptive language to compare the categories based on count.</li> </ul>	
Geometry				
	A student at this level	A student at this level	A student at this level	
K.G.1	<ul> <li>identifies objects in the environment that mimic simple shapes (e.g., identifies a clock face as a circle or a tortilla chip as a triangle).</li> </ul>	<ul> <li>describes objects in the environment using names of shapes and describes the relative positions of these objects using appropriate terminology.</li> </ul>	<ul> <li>asks and answers questions about the shapes and relative positions of multiple objects in the environment.</li> </ul>	
K.G.2	<ul> <li>matches two similar shapes with different orientations or sizes.</li> </ul>	<ul> <li>correctly names squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres regardless of their orientations or overall sizes.</li> </ul>	<ul> <li>makes comparative statements about similar shapes with different orientations or sizes.</li> </ul>	
K.G.3	<ul> <li>understands the difference between "flat" and "solid" shapes.</li> </ul>	<ul> <li>identifies shapes as two-dimensional ("flat") or three-dimensional ("solid").</li> </ul>	<ul> <li>describes the two-dimensional characterizations of some three-dimensional shapes (e.g., describes a cube as having square faces or a cone as having a circular part and a triangular part).</li> </ul>	

Kindergart	t <b>en Math</b> Michigan Ear	Michigan Early Literacy & Mathematics Benchmark Assessments			
K.G.4	<ul> <li>for two given two-dimensional shapes, informally describes one way they are similar and one way they are different.</li> </ul>	<ul> <li>analyzes and compares two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities and differences.</li> </ul>	<ul> <li>uses informal language to describe and compare the parts and other attributes of two- and three-dimensional shapes, including unfamiliar shapes.</li> </ul>		
K.G.5	<ul> <li>differentiates between shapes that consist of straight and curved components.</li> </ul>	<ul> <li>models shapes in the world by building shapes from components and drawing shapes.</li> </ul>	<ul> <li>creates and compares different models of the same shape.</li> </ul>		
K.G.6	<ul> <li>composes simple shapes to form larger shapes.</li> </ul>	<ul> <li>composes simple shapes to form specific larger shapes.</li> </ul>	<ul> <li>composes a given set of simple shapes in multiple ways to form multiple larger shapes (e.g., composes two identical isosceles right triangles to form a square, a larger isosceles right triangle, and a parallelogram-shaped figure) and identifies the component parts of larger shapes.</li> </ul>		