

# BENCHMARK COMPLEXITY REPORT

## MATHEMATICS GRADE K



**Key:** **OCS Code** = The benchmark code. Consists of Grade (K-8), Domain (2-3 character alpha code), Strand (1-3 character alpha code), Standard (1-9), Benchmark Number (1 or 1-1 and up), and Complexity (a, b, c).  
**Benchmark** = The wording of the benchmark.  
**CCSS Code** = Common Core State Standards, developed by National Governors Association Center for Best Practices, Council of Chief State School Officers (www.corestandards.org).  
**CRS Strand** = ACT College Readiness Standards developed by ACT, Inc. (www.act.org).  
**The CRS Strands are:** BOA = Basic Operations & Applications, PSD = Probability/Statistics/Data, NCP = Numbers/Concepts/Properties, XEI = Expression/Equation & Inequality, GRE = Graphical Representations, PPF = Properties of Plane Figures, MEA = Measurement, FUN = Functions.

a. Low Complexity				b. Intermediate Complexity				c. High Complexity			
OCS Code	Benchmark	CCSS Code	CRS Strand	OCS Code	Benchmark	CCSS Code	CRS Strand	OCS Code	Benchmark	CCSS Code	CRS Strand
<b>DOMAIN: Standards for Mathematical Content</b>											
<b>Counting and Cardinality</b>											
K.SMC.CC.1.1.a	Count to 100 by ones and by tens	K.CC.A.1	NCP	K.SMC.CC.1.2.b	Count forward beginning from a given number within a known sequence	K.CC.A.2	NCP	K.SMC.CC.1.3-2.c	Represent a number of objects with a written numeral 0-20	K.CC.A.3	NCP
K.SMC.CC.2.1-2.a	Count each object in a series of objects by pairing it with only one number name	K.CC.B.4a	NCP	K.SMC.CC.1.3-1.b	Write numbers from 0 to 20	K.CC.A.3	NCP	K.SMC.CC.2.1-1.c	Relate counting to a quantity	K.CC.B.4	NCP
				K.SMC.CC.2.1-3.b	Show that the last number name counted tells the number of objects	K.CC.B.4b	NCP	K.SMC.CC.2.2.c	Count up to 20 objects arranged in a line, a rectangular array, a circle, or a scattered configuration	K.CC.B.5	NCP
				K.SMC.CC.2.1-4.b	Show that each successive number name refers to a quantity that is one larger	K.CC.B.4c	NCP				
				K.SMC.CC.3.1.b	Determine whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group	K.CC.C.6	NCP				
				K.SMC.CC.3.2.b	Compare two numbers between 1 and 10 presented as written numerals	K.CC.C.7	NCP				
<b>Operations and Algebraic Thinking</b>											
				K.SMC.OA.1.1.b	Represent addition and subtraction with objects and actions	K.OA.A.1	BOA	K.SMC.OA.1.2.c	Solve addition and subtraction word problems with numbers up to 10	K.OA.A.2	BOA
								K.SMC.OA.1.3.c	Decompose numbers less than or equal to 10 into pairs in more than one way	K.OA.A.3	BOA
								K.SMC.OA.1.4.c	Find any number from 1 to 9 that makes 10 when added to a given number	K.OA.A.4	BOA
								K.SMC.OA.1.5.c	Add and subtract numbers up to 5 fluently	K.OA.A.5	BOA
<b>Number and Operations in Base Ten</b>											
								K.SMC.NBT.1.1-1.c	Compose numbers from 11 to 19 into groups of 10 and remainders	K.NBT.A.1	NCP
								K.SMC.NBT.1.1-2.c	Decompose numbers from 11 to 19 into groups of 10 and remainders	K.NBT.A.1	NCP
<b>Measurement and Data</b>											
				K.SMC.MD.1.1.b	Describe measurable attributes of one or more objects	K.MD.A.1	MEA				
				K.SMC.MD.1.2.b	Compare two objects with a measurable attribute in common, to see which has more or less of the attribute	K.MD.A.2	MEA				
				K.SMC.MD.2.1.b	Classify and count objects into given categories	K.MD.B.3	MEA				
<b>Geometry</b>											
K.SMC.G.1.1-1.a	Name the shapes of common objects found in the environment	K.G.A.1	MEA	K.SMC.G.1.1-2.b	Describe the relative position of an object to another object	K.G.A.1	MEA	K.SMC.G.2.1.c	Describe the similarities, differences, and parts of two- and three-dimensional shapes	K.G.B.4	MEA
K.SMC.G.1.3.a	Identify shapes as two-dimensional or three-dimensional	K.G.A.3	MEA	K.SMC.G.1.2.b	Name shapes of differing orientations and sizes	K.G.A.2	MEA	K.SMC.G.2.2.c	Create shapes from components by modeling shapes found in the world	K.G.B.5	MEA
								K.SMC.G.2.3.c	Combine simple shapes to form larger shapes	K.G.B.6	MEA
<b>DOMAIN: Standards for Mathematical Practices</b>											
<b>Solve Problems</b>											
								K.SMP.1.1-1.c	Make sense of your problem	MP1	
								K.SMP.1.1-2.c	Reflect on your thinking as you solve your problem	MP1	
								K.SMP.1.1-3.c	Keep trying when your problem is hard	MP1	
								K.SMP.1.1-4.c	Check whether your answer makes sense	MP1	
								K.SMP.1.1-5.c	Solve problems in more than one way	MP1	
								K.SMP.1.1-6.c	Compare the strategies you and others use	MP1	
<b>Reason</b>											



a. Low Complexity				b. Intermediate Complexity				c. High Complexity			
OCS Code	Benchmark	CCSS Code	CRS Strand	OCS Code	Benchmark	CCSS Code	CRS Strand	OCS Code	Benchmark	CCSS Code	CRS Strand
								K.SMP.2.1-1.c	Create mathematical representations using numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects	MP2	
								K.SMP.2.1-2.c	Make sense of the representations you and others use	MP2	
								K.SMP.2.1-3.c	Make connections between representations	MP2	
<b>Construct Arguments</b>											
								K.SMP.3.1-1.c	Make mathematical conjectures and arguments	MP3	
								K.SMP.3.1-2.c	Make sense of others' mathematical thinking	MP3	
<b>Model</b>											
								K.SMP.4.1-1.c	Model real-world situations using graphs, drawings, tables, symbols, numbers, diagrams, and other representations	MP4	
								K.SMP.4.1-2.c	Use mathematical models to solve problems and answer questions	MP4	
<b>Use Tools</b>											
								K.SMP.5.1-1.c	Choose appropriate tools	MP5	
								K.SMP.5.1-2.c	Use tools effectively and make sense of your results	MP5	
<b>Attend to Precision</b>											
								K.SMP.6.1-1.c	Explain your mathematical thinking clearly and precisely	MP6	
								K.SMP.6.1-2.c	Use an appropriate level of precision for your problem	MP6	
								K.SMP.6.1-3.c	Use clear labels, units, and mathematical language	MP6	
								K.SMP.6.1-4.c	Think about accuracy and efficiency when you count, measure, and calculate	MP6	
<b>Use Structure</b>											
								K.SMP.7.1-1.c	Look for mathematical structures such as categories, patterns, and properties	MP7	
								K.SMP.7.1-2.c	Use structures to solve problems and answer questions	MP7	
<b>Express Regularity</b>											
								K.SMP.8.1.c	Use context to self-correct words by rereading words that were not recognized	MP8	