

BENCHMARK COMPLEXITY REPORT

MATHEMATICS GRADE 1



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
DOMAIN: Standards for Mathematical Content											
Operations and Algebraic Thinking											
1.SMC.OA.1.1.a	Add and subtract numbers up to 20 to solve word problems	1.OA.A.1	BOA	1.SMC.OA.1.2.b	Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20	1.OA.A.2	BOA	1.SMC.OA.2.2.c	Use subtraction as an unknown-addend problem with numbers up to 20	1.OA.B.4	BOA
1.SMC.OA.3.1.a	Relate counting to addition and subtraction	1.OA.C.5	BOA	1.SMC.OA.2.1.b	Apply properties of operations as strategies to add and subtract	1.OA.B.3	BOA	1.SMC.OA.4.2.c	Determine the unknown whole number in an addition or subtraction equation involving three whole numbers	1.OA.D.8	BOA
				1.SMC.OA.3.2-1.b	Add and subtract numbers up to 20	1.OA.C.6	BOA				
				1.SMC.OA.3.2-2.b	Add and subtract numbers up to 10 fluently	1.OA.C.6	BOA				
				1.SMC.OA.4.1-1.b	Describe the meaning of the equal sign in an addition and subtraction equation	1.OA.D.7	BOA				
				1.SMC.OA.4.1-2.b	Evaluate whether equations involving addition and subtraction are true or false	1.OA.D.7	BOA				
Number and Operations in Base Ten											
1.SMC.NBT.1.1-2.a	Read numerals from 1 to 120	1.NBT.A.1	NCP	1.SMC.NBT.1.1-1.b	Count numbers up to 120, starting at any number less than 120	1.NBT.A.1	NCP	1.SMC.NBT.1.1-4.c	Represent a number of up to 120 objects with a written numeral	1.NBT.A.1	NCP
1.SMC.NBT.1.1-3.a	Write numerals from 1 to 120	1.NBT.A.1	NCP	1.SMC.NBT.2.1.b	Represent the two digits of a two-digit number in amounts of tens and ones	1.NBT.B.2	NCP	1.SMC.NBT.2.2-1.c	Compare two two-digit numbers based on a breakdown into tens and ones	1.NBT.B.3	NCP
1.SMC.NBT.3.1-1.a	Add a two-digit and a one-digit number using numbers up to 100	1.NBT.C.4	BOA	1.SMC.NBT.3.3-1.b	Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 leading to positive or zero differences	1.NBT.C.6	BOA	1.SMC.NBT.2.2-2.c	Record the results of comparisons between two two-digit numbers using the symbols $>$, $=$, and $<$	1.NBT.B.3	NCP
1.SMC.NBT.3.1-2.a	Add a two-digit number and a multiple of 10 using numbers up to 100	1.NBT.C.4	BOA					1.SMC.NBT.3.2-1.c	Add and subtract 10 from a two-digit number mentally	1.NBT.C.5	BOA
								1.SMC.NBT.3.2-2.c	Explain the process of adding and subtracting 10 from a two-digit number mentally	1.NBT.C.5	BOA
								1.SMC.NBT.3.3-2.c	Explain the reasoning used to subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 leading to positive or zero differences	1.NBT.C.6	BOA
Measurement and Data											
1.SMC.MD.1.1-1.a	Order three objects by length	1.MD.A.1	MEA	1.SMC.MD.1.2-2.b	Relate the length measurement of an object to the number of same-size length units that span it with no gaps or overlaps	1.MD.A.2	MEA	1.SMC.MD.3.1-1.c	Organize data into up to three categories	1.MD.C.4	PSD
1.SMC.MD.1.1-2.a	Compare the lengths of two objects indirectly by using a third object	1.MD.A.1	MEA	1.SMC.MD.2.1-1.b	Write time in hours and half-hours using analog and digital clocks	1.MD.B.3	MEA	1.SMC.MD.3.1-2.c	Assess the total number of data points overall and in up to three categories	1.MD.C.4	PSD
1.SMC.MD.1.2-1.a	Express the length of an object as a whole number of length units	1.MD.A.2	MEA	1.SMC.MD.2.1-2.b	Tell time in hours and half-hours using analog and digital clocks	1.MD.B.3	MEA	1.SMC.MD.3.1-3.c	Compare the number of data points in up to three categories to each other	1.MD.C.4	PSD
Geometry											
				1.SMC.G.1.1-1.b	Distinguish between defining attributes versus non-defining attributes of shapes	1.G.A.1	MEA	1.SMC.G.1.2-1.c	Compose two-dimensional shapes to create a composite shape	1.G.A.2	MEA
				1.SMC.G.1.1-2.b	Build and draw shapes that demonstrate defining attributes	1.G.A.1	MEA	1.SMC.G.1.2-2.c	Compose two-dimensional composite shapes into a new shape	1.G.A.2	MEA
								1.SMC.G.1.2-3.c	Compose three-dimensional shapes to create a composite shape	1.G.A.2	MEA
								1.SMC.G.1.2-4.c	Compose three-dimensional composite shapes into a new shape	1.G.A.2	MEA
								1.SMC.G.1.3-1.c	Partition circles and rectangles into two and four equal shares	1.G.A.3	MEA
								1.SMC.G.1.3-2.c	Describe two and four shares of partitioned circles and rectangles using words and phrases	1.G.A.3	MEA
								1.SMC.G.1.3-3.c	Describe a whole in terms of shares	1.G.A.3	MEA
DOMAIN: Standards for Mathematical Practices											

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OCS Code	Benchmark	CCSS Code	CRS Strand	OCS Code	Benchmark	CCSS Code	CRS Strand	OCS Code	Benchmark	CCSS Code	CRS Strand
Solve Problems											
								1.SMP.1.1-1.c	Make sense of your problem		MP1
								1.SMP.1.1-2.c	Reflect on your thinking as you solve your problem		MP1
								1.SMP.1.1-3.c	Keep trying when your problem is hard		MP1
								1.SMP.1.1-4.c	Check whether your answer makes sense		MP1
								1.SMP.1.1-5.c	Solve problems in more than one way		MP1
								1.SMP.1.1-6.c	Compare the strategies you and others use		MP1
Reason											
								1.SMP.2.1-1.c	Create mathematical representations using numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects		MP2
								1.SMP.2.1-2.c	Make sense of the representations you and others use		MP2
								1.SMP.2.1-3.c	Make connections between representations		MP2
Construct Arguments											
								1.SMP.3.1-1.c	Make mathematical conjectures and arguments		MP3
								1.SMP.3.1-2.c	Make sense of others' mathematical thinking		MP3
Model											
								1.SMP.4.1-1.c	Model real-world situations using graphs, drawings, tables, symbols, numbers, diagrams, and other representations		MP4
								1.SMP.4.1-2.c	Use mathematical models to solve problems and answer questions		MP4
Use Tools											
								1.SMP.5.1-1.c	Choose appropriate tools		MP5
								1.SMP.5.1-2.c	Use tools effectively and make sense of your results		MP5
Attend to Precision											
								1.SMP.6.1-1.c	Explain your mathematical thinking clearly and precisely		MP6
								1.SMP.6.1-2.c	Use an appropriate level of precision for your problem		MP6
								1.SMP.6.1-3.c	Use clear labels, units, and mathematical language		MP6
								1.SMP.6.1-4.c	Think about accuracy and efficiency when you count, measure, and calculate		MP6
Use Structure											
								1.SMP.7.1-1.c	Look for mathematical structures such as categories, patterns, and properties		MP7
								1.SMP.7.1-2.c	Use structures to solve problems and answer questions		MP7
Express Regularity											
								1.SMP.8.1.c	Create and justify rules, shortcuts, and generalizations		MP8