BENCHMARKS WITH EXAMPLES REPORT
MATHEMATICS GRADE 1

ARCHDIOCESE OF CHICAGO

Key:

Status = Benchmarks designated as "Focus" are aligned to the Terra Nova, third edition. Benchmarks designated "Supporting" are not.

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).

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.

DOMAIN: Standards for Mathematical Content				
OCS Code:	**Strand: *Operations and Algebraic Thinking (OA)***	**Examples and Notes:**	**CCSS Code:**	**CRS Strand:**
1.SMC.OA.1	**Represent and solve problems involving addition and subtraction.**			
1.SMC.OA.1.1.a	Add and subtract numbers up to 20 to solve word problems	e.g., Situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. Note: Use objects, drawings, and equations with a symbol for the unknown number to represent the problem.	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	e.g., Use objects, drawings, and equations with a symbol for the unknown number to represent the problem	1.OA.A.2	BOA
1.SMC.OA.2	**Understand and apply properties of operations and the relationship between addition and subtraction.**			
1.SMC.OA.2.1.b	Apply properties of operations as strategies to add and subtract	Note: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known (commutative property of addition). To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12 (associative property of addition).	1.OA.B.3	BOA
1.SMC.OA.2.2.c	Use subtraction as an unknown-addend problem with numbers up to 20	e.g., Subtract 10 – 8 by finding the number that makes 10 when added to 8	1.OA.B.4	BOA
1.SMC.OA.3	**Add and subtract within 20.**			
1.SMC.OA.3.1.a	Relate counting to addition and subtraction	e.g., Count on 2 to add 2	1.OA.C.5	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	Note: Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	1.OA.C.6	BOA
1.SMC.OA.4	**Work with addition and subtraction equations.**			
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	Note: Which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2	1.OA.D.7	BOA
1.SMC.OA.4.2.c	Determine the unknown whole number in an addition or subtraction equation involving three whole numbers	e.g., Determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? – 3, 6 + 6 = ?	1.OA.D.8	BOA
OCS Code:	**Strand: *Number and Operations in Base Ten (NBT)***	**Examples and Notes:**	**CCSS Code:**	**CRS Strand:**
1.SMC.NBT.1	**Extend the counting sequence.**			
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.1.1-2.a	Read numerals from 1 to 120		1.NBT.A.1	NCP
1.SMC.NBT.1.1-3.a	Write numerals from 1 to 120		1.NBT.A.1	NCP

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OCS Code	Benchmark	Examples and Notes	CCSS Code	CRS Strand
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.2	**Understand place value.**			
1.SMC.NBT.2.1.b	Represent the two digits of a two-digit number in amounts of tens and ones	Note: 10 can be thought of as a bundle of ten ones — called a "ten." The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three four, five, six, seven, eight, or nine tens (and 0 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.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	**Use place value understanding and properties of operations to add and subtract.**			
1.SMC.NBT.3.1-1.a	Add a two-digit and a one-digit number using numbers up to 100	Note: Use concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	1.NBT.C.4	BOA
1.SMC.NBT.3.1-2.a	Add a two-digit number and a multiple of 10 using numbers up to 100	e.g., In adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten	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.3.3-1.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	Note: Use concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	1.NBT.C.6	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	Note: Relate the strategy to a written method and explain the reasoning used.	1.NBT.C.6	BOA
OCS Code:	**Strand:** *Measurement and Data (MD)*	**Examples and Notes:**	**CCSS Code:**	**CRS Strand:**
1.SMC.MD.1	**Measure lengths indirectly and by iterating length units.**			
1.SMC.MD.1.1-1.a	Order three objects by length		1.MD.A.1	MEA
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.1.2-1.a	Express the length of an object as a whole number of length units	Note: Lay multiple copies of a shorter object (the length unit) end to end.	1.MD.A.2	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	Note: Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.	1.MD.A.2	MEA
1.SMC.MD.2	**Tell and write time.**			
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.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	**Represent and interpret data.**			
1.SMC.MD.3.1-1.c	Organize data into up to three categories		1.MD.C.4	PSD
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.3.1-3.c	Compare the number of data points in up to three categories to each other		1.MD.C.4	PSD

OCS Code:	Strand: *Geometry (G)*	Examples and Notes:	CCSS Code:	CRS Strand:
1.SMC.G.1	**Reason with shapes and their attributes.**			
1.SMC.G.1.1-1.b	Distinguish between defining attributes versus non-defining attributes of shapes	e.g., Triangles are closed and three-sided versus color, orientation, overall size	1.G.A.1	MEA
1.SMC.G.1.1-2.b	Build and draw shapes that demonstrate defining attributes	e.g., Triangles are closed and three-sided versus color, orientation, overall size	1.G.A.1	MEA
1.SMC.G.1.2-1.c	Compose two-dimensional shapes to create a composite shape	e.g., Rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles	1.G.A.2	MEA
1.SMC.G.1.2-2.c	Compose two-dimensional composite shapes into a new shape	e.g., Rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles	1.G.A.2	MEA
1.SMC.G.1.2-3.c	Compose three-dimensional shapes to create a composite shape	e.g., Cubes, right rectangular prisms, right circular cones, and right circular cylinders	1.G.A.2	MEA
1.SMC.G.1.2-4.c	Compose three-dimensional composite shapes into a new shape	e.g., Cubes, right rectangular prisms, right circular cones, and right circular cylinders	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	e.g., Halves, fourths, quarters, half of, fourth of, and quarter of	1.G.A.3	MEA
1.SMC.G.1.3-3.c	Describe a whole in terms of shares	e.g., Two of four, one of four; Note: Understand that for these examples that decomposing into more equal shares creates smaller shares.	1.G.A.3	MEA
DOMAIN: Standards for Mathematical Practices			
OCS Code:	Strand: *Solve Problems (MP1)*	Examples and Notes:	CCSS Code:	CRS Strand:
1.SMP.1	**1. Make sense of problems and persevere in solving them.**			
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	
OCS Code:	Strand: *Reason (MP2)*	Examples and Notes:	CCSS Code:	CRS Strand:
1.SMP.2	**2. Reason abstractly and quantitatively.**			
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	
OCS Code:	Strand: *Construct Arguments (MP3)*	Examples and Notes:	CCSS Code:	CRS Strand:
1.SMP.3	**3. Construct viable arguments and critique the reasoning of others.**			
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	
OCS Code:	Strand: *Model (MP4)*	Examples and Notes:	CCSS Code:	CRS Strand:
1.SMP.4	**4. Model with mathematics.**			
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	
OCS Code:	**Strand: _Use Tools (MP5)_**	**Examples and Notes:**	**CCSS Code:**	**CRS Strand:**
1.SMP.5	**5. Use appropriate tools strategically.**			
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	
OCS Code:	**Strand: _Attend to Precision (MP6)_**	**Examples and Notes:**	**CCSS Code:**	**CRS Strand:**
1.SMP.6	**6. 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	
OCS Code:	**Strand: _Use Structure (MP7)_**	**Examples and Notes:**	**CCSS Code:**	**CRS Strand:**
1.SMP.7	**7. Look for and make use of 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	
OCS Code:	**Strand: _Express Regularity (MP8)_**	**Examples and Notes:**	**CCSS Code:**	**CRS Strand:**
1.SMP.8	**8. Look for and express regularity in repeated reasoning.**			
1.SMP.8.1.c	Create and justify rules, shortcuts, and generalizations		MP8	