KINDERGARTEN MATHEMATICS BLUEPRINT

In Kindergarten, instructional time should focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

Suggested Quarter/Time	Instructional Focus 1 (MKIF1)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
1st/7 days **Aug. 15-16** **Aug. 19-23** **Aug. 26-30**	**Developing strategies for counting by ones to 10**	**K.CC.1** - Count to 100 by ones and by tens. *This unit focuses on counting to ten by ones. Count to 30 orally.* **K.CC.4** - Understand the relationship between numbers and quantities; connect counting to cardinality. *Students learn the number names and the sequence for numbers through ten.* a When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. b Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. c Understand that each successive number name refers to a quantity that is one larger.) **K.CC.5** - Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. *Students count up to 10 things. There is no expectation at this point that every student will be able to count objects in all configurations specified in this standard.*	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. <u>Look for and make use of structure.</u> 8. Look for and express regularity in repeated reasoning.	**myOER:** Counting Bears No Counting Needed To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF1**. **Teacher**:

Suggested Quarter/Time	Instructional Focus 2 (MKIF2)	CCSS Mathematical Content	CCSS Mathematical Practice	Content

Suggested Quarter/Time	Instructional Focus 2	CCSS Mathematical Content	CCSS Mathematical Practice	Content
1st/10 days Sept. 3-6 (Early Out) Sept. 9-13	**Describing location and position**	**K.G.1** - Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above, below, beside, in front of, behind*, and *next to*. **K.G.2** - Correctly name shapes regardless of their orientations or overall size. *Students are focused on only correct names for shapes, and not on orientation or overall size at this point.*	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF2**. **Teacher:**

Suggested Quarter/Time	Instructional Focus 3 (MKIF3)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
1st/12 days Sept. 16-20th (Sept. 18th Early Out) Sept. 23-27 (in-service Sept. 25th) Sept. 30-Oct. 4th (Early Out Oct. 2nd)	**Counting and writing numbers to 12**	**K.CC.1 -** *Students count and represent numbers with numerals up to 10.* **K.CC.3-** Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). *Students learn that 0 represents a count of no objects. They write numbers from 0-10.* **K.CC.4.a.b.c** **K.CC.5**	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF3**. **Teacher:**

Suggested Quarter/Time	Instructional Focus 4 (MKIF4)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
1st/10 days Oct. 7-11th Oct. 14-18 (Early Out Oct. 16)	Comparing numbers to 12	**K.CC.3 -** *Students represent up to 10 objects with a numeral.* **K.CC.5**- *Students count up to 10 objects and count out up to 10 objects.* **K.CC.6** - Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.[1] ([1]Include groups with up to ten objects). **K.CC.7** - Compare two numbers between 1 and 10 presented as written numerals.	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. <u>Reason abstractly and quantitatively.</u> 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics**.** 5. Use appropriate tools strategically. 6. Attend to precision. 7. <u>Look for and make use of structure.</u> 8. Look for and express regularity in repeated reasoning.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF4**. **Teacher:**

Suggested Quarter/Time	Instructional Focus 5 (MKIF5)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
2nd/11 days Oct. 21-24 (conferences 21-23) Oct. 28-Nov. 1st) Nov. 4-5	Sorting and classifying by attributes	**K.CC.1 -** Students continue to count and use one--to-- one correspondence up to 12. Count to 60 orally. Count by 10's to 60. **K.CC.4.a** **K.MD.1** - Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. *(Do not describe several measurable attributes of a single object at this time).* **K.MD.2** - Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.* (*Do not describe the difference yet.*) **K.MD.3** - Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.[3] ([3]Limit category	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. <u>Construct viable arguments and critique the reasoning of others.</u> 4. Model with mathematics**.** 5. Use appropriate tools strategically. 6. <u>Attend to precision.</u> 7. Look for and make use of structure.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF5**. **Teacher:**

		counts to be less than or equal to 10). (*Students do not yet sort the categories by count.*)	8. Look for and express regularity in repeated reasoning	

Suggested Quarter/Time	Instructional Focus 6 (MKIF6)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
2nd/9 days **Nov. 6 (EO)-Nov. 8 (no school Nov. 11)** **Nov.12-15** **Nov. 18-19**	**Counting and representing quantities to 20.**	**K.CC.1** **K.CC.2** - Count forward beginning from a given number within the known sequence (instead of having to begin at 1). **K.CC.3**, **K.CC.4a.b.c**, **K.CC.5**, **K.CC.6**	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. <u>Reason abstractly and quantitatively.</u> 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics**.** 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF6**. **Teacher:**

Suggested Quarter/Time	Instructional Focus 7 (MKIF7)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
2nd/11 days **Nov. 20 (EO)-22** **Nov. 25-27** **Dec. 2-6 (EO 4th)**	**Using 2-D and 3-D Geometry**	**K.MD.1**, **K.MD.2**, **K.MD.3 -** *At this time students describe several measurable attributes.* **K.G.1**, **K.G.2** **K.G.3** - Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). **K.G.4** - Analyze and compare two-- and three--dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). (*At this time students are not expected to analyze parts and attributes of shapes.*)	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. <u>Construct viable arguments and critique the reasoning of others.</u> 4. Model with mathematics**.** 5. <u>Use appropriate tools strategically.</u> 6. Attend to precision.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF7**. **Teacher:**

| | | | 7. [Look for and make use of structure.](#) | |
| | | | 8. Look for and express regularity in repeated reasoning. | |

Suggested Quarter/Time	Instructional Focus 8 (MKIF8)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
2nd/10 days **Dec. 9-13** **Dec. 16-20 (20th EO)**	**Adding whole numbers within 10**	**K.OA.1** - Represent addition and subtraction with objects, fingers, mental images, drawings[2], sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. ([2]Drawings need not show details, but should show the mathematics in the problem.) (*The focus in this unit is on addition. Students will see equations modeled, but are not expected to write them.*) **K.OA.2** - Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. (*Students solve addition problems using objects.*) **K.OA.3** - Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1). (*Students are not expected to use equations.*) **K.OA.4** - For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. (*Students begin to develop strategies to make a ten, but are not expected to know all combinations at this point.*) **K.OA.5** - Fluently add and subtract within 5. (*Students focus only on addition within 5, but fluency is not expected at this point.*)	**Directly addressed practices are underlined** 1. [Make sense of problems and persevere in solving them.](#) 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics**.** 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. [Look for and express regularity in repeated reasoning.](#)	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF8**. **Teacher:**

Suggested Quarter/Time	Instructional Focus 9 (MKIF9)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
2nd/11 days	**Subtracting whole numbers**	**K.OA.1**, **K.OA.2**, **K.OA.3**, **K.OA.4**, **K.OA.5** - *Students see equations modeled, but are not*	**Directly addressed practices are underlined**	**myOER:**

| Jan.6-10 Jan. 13-16 Jan. 21-22 (22nd EO) | | *expected to write them. Students solve subtraction problems within 10 using objects. They continue to develop strategies to decompose 10 or less. Students add and subtract within 5, though not fluently.* | 1. [Make sense of problems and persevere in solving them.](#) 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. [Model with mathematics](#)**.** 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning. | To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF9**. **Teacher:** |

Suggested Quarter/Time	Instructional Focus 10 (MKIF10)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
3rd/5 days Jan. 23-24 Jan. 27-29	**Counting to 50**	**[K.CC.1](#)**, **[K.CC.2](#)**, **[K.CC.3](#)**, **[K.CC.4.c](#)** - *Students recognize and use number patterns to count to 50 by tens and ones (rote counting).*	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. [Reason abstractly and quantitatively.](#) 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics**.** 5. Use appropriate tools strategically. 6. Attend to precision. 7. [Look for and make use of structure.](#) 8. Look for and express regularity in repeated reasoning.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF10**. **Teacher:**

Suggested Quarter/Time	Instructional Focus 11 (MKIF11)	CCSS Mathematical Content	CCSS Mathematical Practice	Content

Suggested Quarter/Time	Instructional Focus 12 (MKIF12)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
3rd/13 days **Jan. 30-31** **Feb. 3-7 (5th EO)** **Feb. 10-13 (no school Feb. 14th)** **Feb. 18-19** ****Round-up Feb. 20-21**	**Measuring and Comparing Length and Weight**	**K.MD.1**, **K.MD.2**	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics**.** 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF11**. **Teacher:**

Suggested Quarter/Time	Instructional Focus 12 (MKIF12)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
3rd/12 days **Feb. 24-28** **March 3-7 (5th EO)** **March 10-11**	**Making Combinations of 10**	**K.CC.7**, **K.OA.3**, **K.OA.4** - *The writing of equations is encouraged, but it is not required.*	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics**.** 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF12**. **Teacher:**

Suggested Quarter/Time	Instructional Focus 13	CCSS Mathematical Content	CCSS Mathematical Practice	Content

(MKIF13)				
3rd/10 days **March 12-14** **March 17-21** **March 24-25** **(conferences March 25-27)**	**Composing and Decomposing 11 through 19**	**K.NBT.1** - Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF13**. **Teacher:**

Suggested Quarter/Time	Instructional Focus 14 (MKIF14)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
4th/10 days **March 26-27** **March 31-April 4th** **(April 2nd EO)** **April 7-9**	**Counting and Using Number Patterns to 100**	**K.CC.1** - *Students rote count to 100 by ones and tens.* **K.CC.2, K.CC.4.c, K.CC.3, K.CC.7**	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF14**. **Teacher:**

Suggested Quarter/Time	Instructional Focus 15 (MKIF15)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
4th/9 days **April 10-11** **April 14-17 (April 16 EO)** **April 22-25**	**Making and Comparing Shapes**	**K.G.4** **K.G.5** - Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. **K.G.6** - Compose simple shapes to form larger shapes. *For example, "Can you join these two triangles with full sides touching to make a rectangle?"*	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF15**. **Teacher:**

Suggested Quarter/Time	Instructional Focus 16 (MKIF16)	CCSS Mathematical Content	CCSS Mathematical Practice	Content
4th/10 days **April 28-May 2** **May 5-9 (7th EO)**	**Solving Addition and Subtraction Problems**	**K.OA.1**, **K.OA.2**, **K.OA.3**, **K.OA.4**, **K.OA.5**	**Directly addressed practices are underlined** 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	**myOER:** To find more exemplars for this instructional focus, please use the **Advanced Search** and type the keyword – **MKIF16**. **Teacher:**

Content-myOER:

myOER.org (OER—open educational resources = free) is a website containing ELA and Mathematics resources aligned to the Common Core Standards and Standards of Mathematical Practice. The resources added by South Dakota curators have been rated using a strict rubric to support best practices in teaching. (The rubric can be found at myOER.org under the Resources tab.) Only lessons rating a 2 or 3 are uploaded to the myOER by our SD curators. This blueprint offers two examples of content available through myOER. Numerous additional free resources aligned to the CCSS are available at myOER.

Adapted from The Charles A. Dana Center at the University of Texas at Austin; CommonCoreTools.me by Bill McCallum; and Common Core State Standards for Mathematics, http://doe.sd.gov/board/packets/documents/Sept10/CommonCore_document3.pdf, http://www.corestandards.org/assets/CCSSI_Mathematics_Appendix_A.pdf