

Unpacked South Dakota State Mathematics Standards

Purpose: In order for students to have the best chance of success, standards, assessment, curriculum resources, and instruction must be aligned in focus, coherence, and rigor. Unpacked standards documents are intended to help align instruction to the focus, coherence, and rigor of the South Dakota State Mathematics Standards. The standards have been organized in clusters as they are not so much built from topics, but rather woven out of progressions. Not all content in a given grade is emphasized equally in the mathematics standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. To say that some things have greater emphasis is not to say that anything in the standards can safely be neglected in instruction. Neglecting standards will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.

Domain: Counting and Cardinality		Grade Level: Kindergarten
K.CC.C Cluster: Compare Numbers		
Students develop strategies to compare two concrete quantities and connect that idea to comparing two numerals.		
<p>**This is a MAJOR cluster. Students should spend the large majority of their time (65-85%) on the major work of the grade. Supporting work and, where appropriate, additional work should be connected to and engage students in the major work of the grade.</p> <p>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. Include groups with up to ten objects.</p> <p>K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.</p>		
Aspects of Rigor for Student Learning: (Conceptual, Procedural, and/or Application)		
Conceptual Understanding	Procedural Fluency	Application
Compare two groups of objects and determine if there are more than, less than or an equal amount of objects. (K.CC.6) Teacher Note: Students are not required to identify the number of objects in each group or to quantify the difference (eg., group A has 3 more than group B).		
Compare two numbers between 1 and 10 presented as written numerals (K.CC.7)		
Enacting the Mathematical Practices - Evidence of Students Engaging in the Practices		
<ol style="list-style-type: none"> 1. Make sense of problems and persevere in solving them. <ul style="list-style-type: none"> • Learners persevere to count to higher numbers • Learners maintain one-to-one counting 2. Reason abstractly and quantitatively. <ul style="list-style-type: none"> • Represent sets of objects with the number of counts 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 		

- Count objects to tell the number items in a set
 - Count out a number of items of a given count
- 5. Use appropriate tools strategically.**
- Use hundreds charts, number lines, and other supports to learn the forward and backward number word sequence
- 6. Attend to precision.**
- Learners develop the vocabulary of counting and learn the number names
 - Use clear vocabulary to describe the relative difference between sizes of sets
- 7. Look for and make use of structure.**
- Learners begin to use the pattern of ones and decades when verbally counting by ones
 - Learners will use their knowledge of the forward number sequence to count backward
 - Learners use the structure of the oral counting series to find the number of items in a set
- 8. Look for and express regularity in repeated reasoning.**

Vertical and Horizontal Coherence and Learning Progressions

<u><i>Previous Learning Connections</i></u>	<u><i>Current Learning Connections</i></u>	<u><i>Future Learning Connections</i></u>
<p>Early childhood learning guidelines address:</p> <p>Recognize and name numerals 1 to 5</p> <p>Compare two groups (Containing up to 5 objects each) and describe them using comparative words, such as, less, fewer, or equal</p> <p>Look at a group of up to 4 objects and quickly see and say the number of objects</p>	<p>Learners in kindergarten will continue in the Counting and Cardinality domain to use counting to tell the number of objects (K.CC.4, K.CC.5)</p> <p>Learners expand on their knowledge of classifying objects and counting the number of objects in each category. (K.MD.3)</p>	<p>These understandings developed in kindergarten will support the following learning in first grade:</p> <p>Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$. (1.NBT.3)</p> <p>Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. (1.MD.4)</p>

Vocabulary (Key Terms Used by Teachers and Students in this Cluster):

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|---|--|---|
| <ul style="list-style-type: none"> • Compare • More • More than • Most • Greater • Greater than | <ul style="list-style-type: none"> • Less • Less than • Least • Fewer • Fewer than • Equal | <ul style="list-style-type: none"> • Same as • Set • Group • Numerals • Difference |
|---|--|---|

Relevance, Explanations, and Examples:

Physical objects may be used to compare quantities. Numeral cards with dots can be a support as students move to comparing numerals.



1	2	3	4
5	6	7	8
9	10	11	12