

SD Common Core State Standards Disaggregated Math Template

Domain:	Operations and Algebraic Thinking	Cluster:	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from	Grade level:	K
----------------	-----------------------------------	-----------------	---	---------------------	---

Correlating Standard in Previous Year	Number Sequence & Standard	Correlating Standard in Following Year
	K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings (drawings need not show details, but should show the mathematics in the problem), sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	1.OA.1 Uses addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Student Friendly Language:
I can use a strategy to solve addition problems.
I can use a strategy to solve subtraction problems.

Know (Factual)	Understand (Conceptual) The students will understand that:	Do (Procedural, Application, Extended Thinking)
<ul style="list-style-type: none"> ● number name ● number value ● one-to-one correspondence ● addition ● subtraction 	<p>Adding means putting together.</p> <p>Subtracting means taking apart.</p> <p>There are multiple strategies to solve addition and subtraction</p> <p>There are different strategies that work best for individual students.</p>	<p>Use manipulatives to represent an addition or subtraction problem.</p> <p>Draw a simple picture that represents an addition or subtraction problem.</p>

Key Vocabulary:				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">numbers</td> <td style="width: 50%;">addition</td> </tr> <tr> <td>subtraction</td> <td>represent</td> </tr> </table>	numbers	addition	subtraction	represent
numbers	addition			
subtraction	represent			
Relevance and Applications: How might the grade level expectation be applied at home, on the job or in a real-world, relevant context? Include at least one example stem for the conversation with students to answer the question “why do I have to learn this”?				
<p>At the grocery store, add up the number of items in your cart.</p> <p>A waitress can add or subtract chairs to fit the number of guests at the table.</p> <p>You can find out how many snacks you will need for the boys and girls in the class.</p>				

SD Common Core State Standards Disaggregated Math Template

Domain:	Operations and Algebraic Thinking	Cluster:	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from	Grade level:	K
----------------	-----------------------------------	-----------------	---	---------------------	---

Correlating Standard in Previous Year	Number Sequence & Standard	Correlating Standard in Following Year
	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.	1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.

Student Friendly Language:
I can put together and take apart numbers (addition and subtraction) up to ten after hearing a word problem.
I can use objects or create drawings to show my thinking.

Know (Factual)	Understand (Conceptual) I want students to understand that....	Do (Procedural, Application, Extended Thinking)
<ul style="list-style-type: none"> ● one-to-one correspondence ● addition ● subtraction ● equal ● more ● less ● fewer 	<p>The number changes when you add or subtract, except for zero.</p> <p>Addition is putting together and adding to and subtraction is taking apart and from.</p> <p>Visuals (drawings and manipulatives) can be used to solve word problems.</p> <p>A word problem is a story that you will use numbers to solve.</p>	<p>Model the word problem with objects or numbers.</p> <p>Prove/explain solutions using manipulatives or drawings.</p> <p>Use one or more strategies to solve addition and subtraction word problems.</p>

Key Vocabulary:										
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">addition</td> <td style="width: 50%;">subtraction</td> </tr> <tr> <td>word problem</td> <td>drawings</td> </tr> <tr> <td>equal</td> <td>more</td> </tr> <tr> <td>less</td> <td>fewer</td> </tr> <tr> <td>all together</td> <td>total</td> </tr> </table>	addition	subtraction	word problem	drawings	equal	more	less	fewer	all together	total
addition	subtraction									
word problem	drawings									
equal	more									
less	fewer									
all together	total									

Relevance and Applications: How might the grade level expectation be applied at home, on the job or in a real-world, relevant context? Include at least one example stem for the conversation with students to answer the question “why do I have to learn this”?
I can add the types of Halloween candy I got to find how much I have all together.
I can add the number of boys and girls in the class to find out how many are in the class.

SD Common Core State Standards Disaggregated Math Template

Domain:	Operations and Algebraic Thinking	Cluster:	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from	Grade level:	K
----------------	-----------------------------------	-----------------	---	---------------------	---

Correlating Standard in Previous Year	Number Sequence & Standard	Correlating Standard in Following Year
	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 $5 = 4 + 1$).	1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. 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 $6+6+1=12+1=13$).

Student Friendly Language:
<p>I can decompose numbers from 0-10 into pairs in more than one way.</p> <p>I can use drawings to decompose numbers.</p> <p>I can use number sentences to decompose numbers.</p>

Know (Factual)	Understand (Conceptual) The students will understand that:	Do (Procedural, Application, Extended Thinking)
<ul style="list-style-type: none"> • numbers 0-10 • equations • symbols: + - = • decomposition of numbers 	<p>Quantities can be created using a variety of individual sets.</p> <p>These sets can be arranged in a variety of ways and the sum total is always the same.</p> <p>There are multiple combinations of numbers that equal the same number.</p>	<p>Decompose numbers in a drawing</p> <p>Decompose numbers in an equation</p> <p>Decompose numbers in more than one way</p>

Key Vocabulary:						
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">number</td> <td style="width: 33%;">decompose</td> <td style="width: 33%;">decomposition</td> </tr> <tr> <td>record</td> <td>equation</td> <td>drawing</td> </tr> </table>	number	decompose	decomposition	record	equation	drawing
number	decompose	decomposition				
record	equation	drawing				
<p>Relevance and Applications: How might the grade level expectation be applied at home, on the job or in a real-world, relevant context? Include at least one example stem for the conversation with students to answer the question “why do I have to learn this”?</p>						
<p>If I have a birthday party and I invite 5 friends, I know that 2 are boys and 3 are girls.</p> <p>If I have 10 cents, I can buy a 5 cent piece of candy and know I have 5 cents left.</p>						

SD Common Core State Standards Disaggregated Math Template

Domain:	Operations and Algebraic Thinking	Cluster:	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from	Grade level:	K
----------------	-----------------------------------	-----------------	---	---------------------	---

Correlating Standard in Previous Year	Number Sequence & Standard	Correlating Standard in Following Year
	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.	1.OA.4 –Understand subtraction as an unknown-addend problem.

Student Friendly Language:
I can make 10 by adding on to a number 1-9.
I can record my thinking by using different ways.(using objects, drawings, equations, etc.).

Know (Factual)	Understand (Conceptual) The students will understand that:	Do (Procedural, Application, Extended Thinking)
<ul style="list-style-type: none"> ● numbers to 10 ● addition ● equation ● plus sign ● equal sign 	<p>Each object represents one number.</p> <p>Addition can be combining 2 groups together.</p> <p>Ten can be composed of 2 smaller numbers (1 + 9).</p> <p>There are multiple combinations of numbers that make 10 (7+3, 2+8, 6+4 etc).</p> <p>Thinking can be recorded with an equation.</p> <p>Thinking can be recorded with a drawing.</p> <p>Thinking can be represented on paper.</p> <p>Thinking can be represented with objects.</p>	<p>Identify the different combinations that make 10.</p> <p>Show ways of making 10 with 2 addends (drawing a picture or make an equation), grouping objects together.</p> <p>Investigate how many more it takes to get 10, when starting from a number 1-9.</p> <p>investigate various ways to make 10.</p> <p>Prove that there is more than 1 way to make 10.</p>

Key Vocabulary:								
<table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">number</td> <td style="width: 25%;">addition</td> <td style="width: 25%;">record</td> <td style="width: 25%;"></td> </tr> <tr> <td>answer</td> <td>equation</td> <td>plus</td> <td>drawing</td> </tr> </table>	number	addition	record		answer	equation	plus	drawing
number	addition	record						
answer	equation	plus	drawing					
Relevance and Applications: How might the grade level expectation be applied at home, on the job or in a real-world, relevant context? Include at least one example stem for the conversation with students to answer the question “why do I have to learn this”?								
<p>If I have \$2, how many more dollars do I need to make \$10?</p> <p>I can have 10 people at my birthday party. I have 5 people on my list, how many more people can I invite?</p>								

SD Common Core State Standards Disaggregated Math Template

Domain:	Operations and Algebraic Thinking	Cluster:	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from	Grade level:	K
----------------	-----------------------------------	-----------------	---	---------------------	---

Correlating Standard in Previous Year	Number Sequence & Standard	Correlating Standard in Following Year
	K.OA.5 Fluently add and subtract within 5.	1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.

Student Friendly Language:
I can add numbers to make 5.
I can subtract numbers from 5.

Know (Factual)	Understand (Conceptual) The students will understand that:	Do (Procedural, Application, Extended Thinking)
<ul style="list-style-type: none"> ● numbers 0 through 5 ● one to one correspondence ● addition sign ● subtraction sign ● equal sign 	<p>Addition means putting together.</p> <p>Subtraction means taking apart.</p>	<ul style="list-style-type: none"> ● Add fluently within 5. ● Subtract fluently within 5.

Key Vocabulary:
<u>addition</u> <u>subtraction</u> <u>equals</u>
Relevance and Applications: How might the grade level expectation be applied at home, on the job or in a real-world, relevant context? Include at least one example stem for the conversation with students to answer the question “why do I have to learn this”?
<p>Determine how many people are missing in my group.</p> <p>Determine how many forks we need at the supper table.</p>