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\begin{gathered}
\text { 1st Grade: Marth: Operartions \& Algelbraic } \\
\text { Thhinking } \\
\text { Represent and solve Problems Involving Add ition and } \\
\text { Subtraction }
\end{gathered}
$$

1.OA A 1
1.OA.A 2

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, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Understand and Apply Properties of Operations and the Relationship Between Add ition and Subtraction

Apply properties of operations as strategies to add and subtract. ${ }^{2}$ Examples: 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.)

Understand subtraction as an unknown-addend problem. For example, subtract $10-8$ by finding the number that makes 10 when added to 8 . Add and subtract within 20.
$1 \mathbb{S t}$ Grade: Marth: Operartions \& Algelbraic Thinnkîng : Continued ${ }^{\text {max }}$
Add and subtract with in 20
1.OA.C. 5
Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
Add and subtract within 20, demonstrating fluency for addition and subtraction within 10 . Use strategies such as counting on;
1.OA.C. 6 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 $6+6+1=12+1=13$ ).
Work with Add ition and Subtraction Equations
Understand the meaning of the equal sign, and determine if
1.OA.D. 7 equations involving addition and subtraction are true or false. For example, 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. 8
Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8+$ ? $=11,5={ }_{-}-3,6+6={ }_{-}$.


$1 \mathbb{S}$ Grade: Marth: Numbers \& Operations in

# 圖ase Ten ${ }^{\text {* }}$ Contiônued ${ }^{\text {sis }}$ 

Use Place Value Understand ing and Properties of Operations to Add and subtract

Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10 , using 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. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

Given a two-digit number, mentally find 10 more or 10 less 1.NBT.C. 5 than the number, without having to count; explain the reasoning used.

Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using 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.




| let Girade: Marth: Geometry |  |
| :---: | :---: |
| Reason with shapes and the ir Attributes |  |
| 1.GA1 | Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ; build and draw shapes to possess defining attributes. |
| $1 . G A 2$ | Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or threedimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. Students do not need to learn formal names such as "right rectangular prism." |
| 1.GAB | Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of,fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. |




