

# First Grade Kansas College & Career Readiness Standards for MATH

Record keeping of implementation:

PINK= WEEKLY (Once or Twice/Week)

BLUE=DAILY (3 or MORE X/Week)

ALL OTHERS=Dates Listed

| <b>Operations and Algebraic Thinking: Solving addition and subtraction problems</b> |  |
|---|--|
| <b>OA1</b>  | 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 (by using objects, drawings, and equations with a symbol for the unknown number to represent the problem).   |
| dates ---->   |  |
| <b>OA2</b>  | Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20 (by using objects, drawings, and equations with a symbol for the unknown number to represent the problem).   |
| dates ---->   |  |
| <b>Operations and Algebraic Thinking: Properties of Addition and Subtraction</b>    |  |
| <b>OA3</b>  | Apply properties of operations as strategies to add and subtract. (ex: 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).  |
| dates ---->   |  |
| <b>OA4</b>  | Understand subtraction as an unknown-addend problem. (ex: subtract $10-8$ by finding the number that makes 10 when added to 8).  |
| dates ---->   |  |
| <b>Operations and Algebraic Thinking: Addition and subtraction up to 20</b>         |  |
| <b>OA5</b>  | Relate counting to addition and subtraction (by counting on 2 to add 2).   |
| dates ---->   |  |
| <b>OA6</b>  | Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use mental strategies such as counting on; making ten ( $8+6=8+2+4=10+4$ ); decomposing a number leading to a ten ( $13-4=13-3-1=10-1=9$ ); using the relationship between addition and subtraction (knowing that $8+4=12$ , one knows that $12-8=4$ ); and creating equivalent but easier or known sums (adding $6+7$ by creating the known equivalent $6+6+1=12+1=13$ ). |
| dates ---->   |  |
| <b>Operations and Algebraic Thinking: Addition and Subtraction Equations</b>        |  |
| <b>OA7</b>  | Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. (ex: which of the following equations are true and which are false? $6-6$ , $7=8-1$ , $5+2=2+5$ , $4+1=5+2$ ).  |
| dates ---->   |  |
| <b>OA8</b>  | Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. (ex: determine the unknown number that makes the equation true in each of the equations $8+?=11$ , $5=?-3$ , $6+6=?$ )   |
| dates ---->   |  |

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| <b>Number and Operations in Base Ten: Counting up to 120</b>                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>NBT1</b>   | Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| dates ---->   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Number and Operations in Base Ten: Place Value</b>                           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>NBT2</b>   | Understand that the two digits of a two-digit number represent amounts of tens and ones.  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| dates ---->   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>NBT2a</b>  | Understand 10 can be thought of as a bundle of ten ones - called a 'ten.'   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| dates ---->   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>NBT2b</b>  | Understand the numbers from 11-19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| dates ---->   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>NBT2c</b>  | Understand 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).   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| dates ---->   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>NBT3</b>   | Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$ , $=$ , and $<$ .  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| dates ---->   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Number and Operations in Base Ten: Using Place Value to Add and Subtract</b> |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>NBT4</b>   | Add within 100, including adding a two-digit number and 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. Understanding that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| dates ---->   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>NBT5</b>   | Create a two-digit number, mentally find 10 more and 10 less than the number, without having to count; explain the reasoning used.  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| dates ---->   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>NBT6</b>   | 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.  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| dates ---->   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

