

# 1<sup>st</sup> Grade Math at a Glance 2015-2016

Grading Period	Unit Name	Estimated Time Frame	Start	End
All	Every Day Counts	175 days	8/24	6/2
	Problem Solving	175 days	8/24	6/2
	Number Talks	175 days	8/24	6/2
Grading Period 1  8/24-10/16	Graphing and Setting Up Guided Math	9 days	8/24	9/3
	Diagnostic Numeracy Assessment	5 days	9/4	9/11
	Numeration and Addition & Subtraction 0 -10	23 days	9/14	10/16
Grading Period 2  10/19-12/18	Numeration and Addition & Subtraction 0 -20	25 days	10/19	11/20
	District Assessment (DA Blueprint)	5 days	11/30	12/4
	2D Shapes	10 days	12/7	12/18
Grading Period 3  1/5-3/11		9 days	1/5	1/15
		Numeration 0-120 and Addition & Subtraction	33 days	1/19
	3D Shapes	5 days	3/7	3/11
Grading Period 4  3/21-6/2		4 days	3/21	3/24
		Money	9 days	3/28
	Addition and Subtraction	10 days	4/8	4/22
	District Assessment (DA Blueprint)	5 days	4/25	4/29
	Addition and Subtraction	5 days	5/2	5/6
	Length	10 days	5/9	5/20
	Time	5 days	5/23	5/27
	Personal Financial Literacy	3 days	5/31	6/2

**\*\* Note: Also see Testing Blueprint**

All Year Long	
Process Standards	<p>(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <p>(A) <b>apply</b> <u>mathematics</u> to problems arising in <u>everyday life</u>, society, and the workplace;</p> <p>(B) <b>use</b> a <u>problem-solving model</u> that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;</p> <p>(C) <b>select</b> <u>tools</u>, including real objects, <i>manipulatives</i>, <i>paper and pencil</i>, and <i>technology</i> as appropriate, and techniques, including <i>mental math</i>, <i>estimation</i>, and <i>number sense</i> as appropriate, <u>to solve problems</u>;</p> <p>(D) <b>communicate</b> mathematical ideas, reasoning, and their implications using <u>multiple representations</u>, including symbols, diagrams, graphs, and language as appropriate;</p> <p>(E) <b>create</b> and <b>use</b> <u>representations</u> to organize, record, and <b>communicate</b> <u>mathematical ideas</u>;</p> <p>(F) <b>analyze</b> mathematical <u>relationships</u> to <b>connect</b> and <b>communicate</b> <u>mathematical ideas</u>; and</p> <p>(G) <b>display</b>, <b>explain</b>, and <b>justify</b> <u>mathematical ideas and arguments</u> using precise mathematical language in <u>written or oral communication</u>.</p>
EDC (Daily)	<p>(1.5A) <b>recite</b> numbers <u>forward and backward</u> from <u>any given number</u> between 1 and <b>120</b>;</p> <p><i>Measurement and Geometry</i></p> <p>(1.7E) <b>tell</b> <u>time to the hour and half hour</u> using <u>analog and digital</u> clocks.</p> <p><i>Math Vocabulary Development.</i></p>
Problem Solving (Daily)	<p>(1.3B) <b>use</b> <u>objects and pictorial models</u> to solve word problems involving <u>joining, separating, and comparing</u> sets within <b>20</b> and unknowns as any one of the terms in the problem such as <u><math>2 + 4 = [ ]</math>; <math>3 + [ ] = 7</math>; and <math>5 = [ ] - 3</math></u>;</p> <p>(1.3E) <b>explain</b> <u>strategies</u> used to solve <u>addition and subtraction problems</u> up to <b>20</b> using <u>spoken words, objects, pictorial models, and number</u></p>

	<u>sentences</u> ; and  (1.3F) <b>generate</b> and <b>solve</b> problem situations when <u>given a number sentence</u> involving addition or subtraction of numbers within <b>20</b> .
Number Talks (Daily)	(1.2A) <b>recognize</b> <u>instantly the quantity</u> of structured arrangements;  (1.3C) <b>compose</b> 10 with <u>two or more addends</u> with and without concrete objects;  (1.3D) <b>apply</b> basic <u>fact strategies</u> to <b>add</b> and <b>subtract</b> within <b>20</b> , including <u>making 10</u> and <u>decomposing a number leading to a 10</u> ;

### Grading Period 1

Graphing	(1.8A) <b>collect, sort, and organize</b> data in <u>up to three categories</u> using models/representations such as <u>tally marks or T-charts</u> ;
Setting Up Guided Math	(1.8B) <b>use</b> data to <b>create</b> <u>picture and bar-type graphs</u> ; and  (1.8C) <b>draw conclusions</b> and <b>generate</b> and <b>answer</b> <u>questions</u> using information from <u>picture and bar-type graphs</u> .
Setting Up Work Stations	Review of Kinder TEKS
Diagnostic Numeracy Assessment	Students continue reviewing procedures and routines for workstations.
Numeration and Addition and Subtraction 0 -10	<b><u>Counting to 10</u></b> (Quantity, Numeral, and Word Forms)  (1.5A) <b>recite</b> numbers <u>forward and backward</u> from <u>any given number</u> between 0 and 10;  (1.2D) <b>generate</b> a number that is <u>greater than or less than</u> a given whole number up to 10;  (1.2E) <del>use place value to</del> <b>compare</b> <u>whole numbers</u> up to 10 using <u>comparative language</u> ;  (1.2F) <b>order</b> whole numbers up to 10 <del>using place value and</del> open number lines; and  (1.2G) <b>represent</b> the comparison of <u>two numbers</u> to 10 using the <u>symbols</u>

	<p><u>&gt;, &lt;, or =.</u></p> <p><b><u>Facts to 10</u></b> (Concrete-Pictorial-Abstract)</p> <p>(1.2A) <b>recognize</b> <u>instantly the quantity of structured arrangements</u>; (Example: Dominos and Ten Frames)/ Chunking</p> <p>(1.2B) <b>use</b> <u>concrete and pictorial models to compose and decompose</u> numbers up to 10 in more than one way <del>as so many hundreds, so many tens, and so many ones</del>;</p> <p>(1.3C) <b>compose 10</b> with <u>two or more addends with and without concrete objects</u>;</p> <p>(1.3D) <b>apply</b> basic <u>fact strategies</u> to <b>add</b> and <b>subtract</b> within 10, <del>including making 10 and</del> decomposing a number leading to a 10;</p> <p>(1.5G) <b>apply</b> <u>properties</u> of operations to <u>add and subtract two or three numbers</u>.</p> <p>(1.5E) <b>understand</b> that the <u>equal sign</u> represents a relationship where expressions on each side of the equal sign represent the same value(s);</p> <p>(1.5F) <b>determine</b> the <u>unknown whole number</u> in an <u>addition or subtraction equation</u> when the unknown may be any one of the <u>three or four terms in the equation</u>; and</p> <p>(1.3E) <b>explain</b> <u>strategies</u> used to solve <u>addition and subtraction</u> problems up to 10 using <u>spoken words, objects, pictorial models, and number sentences</u>; and</p> <p><b><u>Problem Solving to 10</u></b> (Direct Model, Counting Strategies, Use of Facts)</p> <p>(1.3B) <b>use</b> <u>objects and pictorial models to solve word problems</u> involving <u>joining, separating, and comparing</u> sets within 10 and <u>unknowns as any one of the terms</u> in the problem such as <math>2 + 4 = [ ]</math>; <math>3 + [ ] = 7</math>; and <math>5 = [ ] - 3</math>;</p> <p>(1.5D) <b>represent</b> <u>word problems</u> involving <u>addition and subtraction</u> of whole numbers up to 10 using <u>concrete and pictorial models and number sentences</u>;</p> <p>(1.3F) <b>generate</b> and <b>solve</b> <u>problem situations</u> when <u>given a number sentence</u> involving <u>addition or subtraction</u> of numbers within 10.</p>
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## Grading Period 2

Numeration and Addition  
and Subtraction 0 -20

### **Counting to 20** (Quantity, Numeral, and Word Forms)

(1.5A) **recite** numbers forward and backward from any given number between 0 and 20;

(1.5B) **skip count** by twos, ~~fives, and tens~~ to determine the total number of **objects** up to 20 in a set; (as a more efficient way of counting a set of objects than by one/ concept of group)

### **Place Value to 20** (Groups of 10, Tens and Ones, 10 plus)

(1.2A) **recognize** instantly the quantity of structured arrangements;

(1.2B) **use** concrete and pictorial models to compose and decompose numbers up to 20 in ~~more than one way~~ as so many hundreds, so many tens, and so many ones;

(1.2C) **use** objects, pictures, and expanded and standard forms to **represent** numbers up to 20;

(1.2D) **generate** a number that is greater than or less than a given whole number up to 20;

(1.2E) **use** place value to **compare** whole numbers up to 20 using comparative language;

(1.2F) **order** whole numbers up to 20 using place value and open number lines; and

(1.2G) **represent** the comparison of two numbers to 20 using the symbols  $\geq$ ,  $<$ , or  $=$ .

### **Facts to 20** (Concrete-Pictorial-Abstract)

(1.2A) **recognize** instantly the quantity of structured arrangements; (Example: Dominos and Ten Frames)/ Chunking

(1.2B) **use** concrete and pictorial models to compose and decompose numbers up to 20 in more than one way ~~as so many hundreds, so many tens, and so many ones~~;

(1.3C) **compose 10** with two or more addends with and without concrete objects;

(1.3D) **apply** basic fact strategies to **add** and **subtract** within **20**, including

	<p>making 10 and decomposing a number leading to a 10;</p> <p>(1.5G) <b>apply</b> <u>properties</u> of operations to <u>add and subtract two or three numbers</u>.</p> <p>(1.5E) <b>understand</b> that the <u>equal sign</u> represents a relationship where expressions on each side of the equal sign represent the same value(s);</p> <p>(1.5F) <b>determine</b> the <u>unknown whole number</u> in an <u>addition or subtraction equation</u> when the unknown may be any one of the <u>three or four terms in the equation</u>; and</p> <p>(1.3E) <b>explain</b> <u>strategies</u> used to solve <u>addition and subtraction</u> problems up to <b>20</b> using <u>spoken words, objects, pictorial models, and number sentences</u>; and</p> <p><b><u>Problem Solving to 20</u></b> (Direct Model, Counting Strategies, Use of Facts)</p> <p>(1.3B) <b>use</b> <u>objects and pictorial models</u> to <b>solve</b> <u>word problems</u> involving <u>joining, separating, and comparing</u> sets within <b>20</b> and <u>unknowns as any one of the terms</u> in the problem such as <math>2 + 4 = [ ]</math>; <math>3 + [ ] = 7</math>; and <math>5 = [ ] - 3</math>;</p> <p>(1.5D) <b>represent</b> <u>word problems</u> involving <u>addition and subtraction</u> of whole numbers up to <b>20</b> using <u>concrete and pictorial models and number sentences</u>;</p> <p>(1.3F) <b>generate</b> and <b>solve</b> <u>problem situations</u> when <u>given a number sentence</u> involving <u>addition or subtraction</u> of numbers within <b>20</b>.</p> <p>(1.8A) <b>collect, sort, and organize</b> data in <u>up to three categories</u> using models/representations such as <u>tally marks or T-charts</u>;</p> <p>(1.8B) <b>use</b> data to <b>create</b> <u>picture and bar-type graphs</u>; and</p> <p>(1.8C) <b>draw</b> <u>conclusions</u> and <b>generate</b> and <b>answer</b> <u>questions</u> using information from <u>picture and bar-type graphs</u>.</p>
DA Assessment	
Geometry 2-Dimensional Shapes	<p>(1.6A) <b>classify</b> and <b>sort</b> <u>regular and irregular two-dimensional</u> shapes based on attributes using informal <u>geometric language</u>;</p> <p>(1.6B) <b>distinguish</b> between <u>attributes</u> that <u>define</u> a two-dimensional or <del>three-dimensional</del> figure and <u>attributes</u> that <u>do not define</u> the shape;</p> <p>(1.6C) <b>create</b> two-dimensional figures, including <u>circles, triangles,</u></p>

	<p><u>rectangles, and squares, as special rectangles, rhombuses, and hexagons;</u></p> <p>(1.6D) <b>identify</b> two-dimensional shapes, including <u>circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons</u> and <b>describe</b> their attributes using formal <u>geometric language</u>;</p> <p>(1.6F) <b>compose</b> two-dimensional shapes by <u>joining two, three, or four figures to produce a target shape in more than one way</u> if possible;</p>
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Grading Period 3	
Geometry 2-Dimensional Shapes	<p>(1.6F) <b>compose</b> two-dimensional shapes by <u>joining two, three, or four figures to produce a target shape in more than one way</u> if possible;</p> <p><b>Fractions:</b></p> <p>(1.6G) <b>partition</b> two-dimensional figures into two and four <u>fair shares or equal parts</u> and <b>describe</b> the <u>parts using words</u>; and</p> <p>(1.6H) <b>identify</b> examples and non-examples of <u>halves and fourths</u>.</p>
Numeration 0-120 and Addition and Subtraction of multiples of 10 and 1's	<p><b><u>Counting to 120</u></b> (Quantity, Numeral, and Word Forms)</p> <p>(1.5A) <b>recite</b> numbers <u>forward and backward</u> from <u>any given number</u> between 0 and <b>120</b>;</p> <p>(1.5B) <b>skip count</b> by twos, fives, and tens to determine the total number of <b>objects</b> up to <b>120</b> in a set; (as a more efficient way of counting a set of objects than by one/ concept of group)</p> <p>(1.5C) <b>use</b> <u>relationships</u> to <b>determine</b> the <u>number that is 10 more and 10 less</u> than a <u>given number</u> up to 120;</p> <p><b><u>Place Value to 120</u></b> (Groups of 10, Tens and Ones, 10 plus)</p> <p>(1.2A) <b>recognize</b> <u>instantly the quantity of structured arrangements</u>;</p> <p>(1.2B) <b>use</b> <u>concrete and pictorial models</u> to <u>compose and decompose</u> numbers up to <b>120</b> in <u>more than one way as so many hundreds, so many tens, and so many ones</u>;</p> <p>(1.2C) <b>use</b> <u>objects, pictures, and expanded and standard forms</u> to <b>represent</b> numbers up to <b>120</b>;</p> <p>(1.3A) <b>use</b> <u>concrete and pictorial models</u> to <b>determine</b> the <u>sum of a</u></p>

	<p><u>multiple of 10 and a one-digit number</u> in problems up to <b>99</b>;</p> <p>(1.5C) <b>use</b> <u>relationships</u> to <b>determine</b> the <u>number that is 10 more and 10 less than a given number</u> up to <b>120</b>;</p> <p>(1.2D) <b>generate</b> a number that is <u>greater than or less than</u> a given whole number up to <b>120</b>;</p> <p>(1.2E) <b>use</b> place value to <b>compare</b> <u>whole numbers</u> up to <b>120</b> using <u>comparative language</u>;</p> <p>(1.2F) <b>order</b> whole numbers up to <b>120</b> using place value and open number lines; and</p> <p>(1.2G) <b>represent</b> the comparison of <u>two numbers</u> to <b>100</b> using the symbols <u>&gt;, &lt;, or =</u>.</p> <p><b><u>Facts to 20</u></b> (Concrete-Pictorial-Abstract)</p> <p>(1.2A) <b>recognize</b> <u>instantly the quantity of structured arrangements</u>; (Example: Dominos and Ten Frames)/ Chunking</p> <p>(1.2B) <b>use</b> <u>concrete and pictorial models</u> to <u>compose and decompose</u> numbers up to 20 in more than one way <u>as so many hundreds, so many tens, and so many ones</u>;</p> <p>(1.3C) <b>compose 10</b> with <u>two or more addends with and without concrete objects</u>;</p> <p>(1.3D) <b>apply</b> basic <u>fact strategies</u> to <b>add</b> and <b>subtract</b> within <b>20</b>, including making 10 and decomposing a number leading to a 10;</p> <p>(1.5G) <b>apply</b> <u>properties</u> of operations to <u>add and subtract two or three numbers</u>.</p> <p>(1.5E) <b>understand</b> that the <u>equal sign</u> represents a relationship where expressions on each side of the equal sign represent the same value(s);</p> <p>(1.5F) <b>determine</b> the <u>unknown whole number</u> in an <u>addition or subtraction equation</u> when the unknown may be any one of the <u>three or four terms in the equation</u>; and</p> <p>(1.3E) <b>explain</b> <u>strategies</u> used to solve <u>addition and subtraction</u> problems up to <b>20</b> using <u>spoken words, objects, pictorial models, and number sentences</u>; and</p>
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	<p><b><u>Problem Solving to 20</u></b> (Direct Model, Counting Strategies, Use of Facts)</p> <p>(1.3B) <b>use</b> <u>objects and pictorial models</u> to <b>solve</b> <u>word problems</u> involving <u>joining, separating, and comparing</u> sets within <b>20</b> and <u>unknowns as any one of the terms</u> in the problem such as <math>2 + 4 = [ ]</math>; <math>3 + [ ] = 7</math>; and <math>5 = [ ] - 3</math>;</p> <p>(1.5D) <b>represent</b> <u>word problems</u> involving <u>addition and subtraction</u> of whole numbers up to <b>20</b> using <u>concrete and pictorial models and number sentences</u>;</p> <p>(1.3F) <b>generate</b> and <b>solve</b> <u>problem situations</u> when <u>given a number sentence</u> involving <u>addition or subtraction</u> of numbers within <b>20</b>.</p> <p>(1.8A) <b>collect, sort, and organize</b> data in <u>up to three categories</u> using models/representations such as <u>tally marks or T-charts</u>;</p> <p>(1.8B) <b>use</b> data to <b>create</b> <u>picture and bar-type graphs</u>; and</p> <p>(1.8C) <b>draw</b> <u>conclusions</u> and <b>generate</b> and <b>answer</b> <u>questions</u> using information from <u>picture and bar-type graphs</u>.</p>
<p>Geometry 3-Dimensional Figures (4 days in Grading Period 4)</p>	<p>(1.6B) <b>distinguish</b> between <u>attributes</u> that <u>define</u> a <u>two-dimensional</u> or three-dimensional figure and <u>attributes</u> that <u>do not define</u> the shape;</p> <p>(1.6E) <b>identify</b> three-dimensional solids, including <u>spheres, cones, cylinders, rectangular prisms (including cubes), and triangular prisms</u>, and describe their attributes using formal <u>geometric language</u>;</p>

Grading Period 4	
<p>Money</p>	<p>(1.4A) <b>identify</b> U.S. coins, including <u>pennies, nickels, dimes, and quarters</u>, by <u>value</u> and describe the <u>relationships among them</u>;</p> <p>(1.4B) <b>write</b> a number with the <u>cent symbol</u> to describe the value of a coin; and</p> <p>(1.4C) <b>use</b> <u>relationships</u> to <u>count by twos, fives, and tens</u> to determine the value of a <u>collection of pennies, nickels, and/or dimes</u>.</p> <p>(1.9A) <b>define</b> money earned as <u>income</u>;</p> <p>(1.9B) <b>identify</b> <u>income</u> as a means of <u>obtaining goods and services</u>, oftentimes making <u>choices</u> between <u>wants and needs</u>;</p>

	(1.9C) <b>distinguish</b> between <u>spending and saving</u>
Addition and Subtraction	<p><b><u>Facts to 20</u></b> (Concrete-Pictorial-Abstract)</p> <p>(1.2A) <b>recognize</b> <u>instantly the quantity of structured arrangements</u>; (Example: Dominos and Ten Frames)/ Chunking</p> <p>(1.2B) <b>use</b> <u>concrete and pictorial models to compose and decompose</u> numbers up to 20 in more than one way <del>as so many hundreds, so many tens, and so many ones</del>;</p> <p>(1.3C) <b>compose 10</b> with <u>two or more addends with and without concrete objects</u>;</p> <p>(1.3D) <b>apply</b> basic <u>fact strategies</u> to <b>add</b> and <b>subtract</b> within <b>20</b>, including making 10 and decomposing a number leading to a 10;</p> <p>(1.5G) <b>apply</b> <u>properties</u> of operations to <u>add and subtract two or three numbers</u>.</p> <p>(1.5E) <b>understand</b> that the <u>equal sign</u> represents a relationship where expressions on each side of the equal sign represent the same value(s);</p> <p>(1.5F) <b>determine</b> the <u>unknown whole number</u> in an <u>addition or subtraction equation</u> when the unknown may be any one of the <u>three or four terms in the equation</u>; and</p> <p>(1.3E) <b>explain</b> <u>strategies</u> used to solve <u>addition and subtraction</u> problems up to <b>20</b> using <u>spoken words, objects, pictorial models, and number sentences</u>; and</p> <p><b><u>Problem Solving to 20</u></b> (Direct Model, Counting Strategies, Use of Facts)</p> <p>(1.3B) <b>use</b> <u>objects and pictorial models to solve word problems</u> involving <u>joining, separating, and comparing</u> sets within <b>20</b> and <u>unknowns as any one of the terms</u> in the problem such as <math>2 + 4 = [ ]</math>; <math>3 + [ ] = 7</math>; and <math>5 = [ ] - 3</math>;</p> <p>(1.5D) <b>represent</b> <u>word problems</u> involving <u>addition and subtraction</u> of whole numbers up to <b>20</b> using <u>concrete and pictorial models and number sentences</u>;</p> <p>(1.3F) <b>generate</b> and <b>solve</b> <u>problem situations</u> when <u>given a number sentence</u> involving <u>addition or subtraction</u> of numbers within <b>20</b>.</p> <p>(1.8A) <b>collect, sort, and organize</b> data in <u>up to three categories</u> using</p>

	<p>models/representations such as <u>tally marks or T-charts</u>;</p> <p>(1.8B) <b>use</b> data to <b>create</b> <u>picture and bar-type graphs</u>; and</p> <p>(1.8C) <b>draw</b> <u>conclusions</u> and <b>generate</b> and <b>answer</b> <u>questions</u> using information from <u>picture and bar-type graphs</u>.</p>
Measurement – Length	<p>(1.7A) <b>use</b> measuring <u>tools to measure</u> the <u>length</u> of objects to reinforce the continuous nature of linear measurement;</p> <p>(1.7B) <b>illustrate</b> that the <u>length</u> of an object is the number of same-size units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other;</p> <p>(1.7C) <b>measure</b> the <u>same object/distance</u> with units of <u>two different lengths</u> and <b>describe</b> <u>how and why</u> the measurements <u>differ</u>;</p> <p>(1.7D) <b>describe</b> a <u>length</u> to the <u>nearest whole</u> unit using a number and a unit; and</p>
Measurement – Time	<p>(1.7E) <b>tell</b> <u>time to the hour and half hour</u> using <u>analog and digital</u> clocks.</p>
Personal Financial Literacy	<p>(1.9A) <b>define</b> money earned as <u>income</u>;</p> <p>(1.9B) <b>identify</b> <u>income</u> as a means of <u>obtaining goods and services</u>, oftentimes making <u>choices</u> between <u>wants and needs</u>;</p> <p>(1.9C) <b>distinguish</b> between <u>spending and saving</u>; and</p> <p>(1.9D) <b>consider</b> <u>charitable giving</u>.</p>