

TES Math Map	Teacher(s): Miki Wapple, Molly Overly & Lorrie Gardner	Creation Date: 11/23/09
	Grade Level: First Grade	Revision Date: January 2010

	First Trimester			Second Trimester					
Math Unit	Mathematical Thinking at Grade 1 Patterning Touchpoints	Number Sense I Number Relationships Comparing Numbers Beginning Problem Solving		Geometry	Fractions	Number Sense II Place Value Problem Solving Data Collection & Analysis		Measurement	Time and Money End of Year Review
Timeframe and Month	September	October	November	December	January	February	March	April	May
Inquiry Questions	<ul style="list-style-type: none"> *What is addition and how is it used? *What is subtraction and how is it used? * How are addition and subtraction related? *What is a pattern? *What patterns are in your life? *What is the repeating unit of the pattern? *How does finding patterns help in counting? 	<ul style="list-style-type: none"> *How can I count these items in the most efficient and accurate way? *How can I tell if I've made a good guess (estimate)? 		<ul style="list-style-type: none"> *How can we describe geometric figures? *How are shapes alike and different? 	<ul style="list-style-type: none"> *What do fractions tell us? *What are some things in the world that have parts? *How can I use manipulatives, drawings, or numerals/symbols to show parts and wholes? 	<ul style="list-style-type: none"> *Can numbers always be related to tens? *How does a position of a digit affect its value? *What are the ways data can be displayed? *How do data displays help us understand information? *What kinds of questions generate data? *What questions can be answered by a data representation? 		<ul style="list-style-type: none"> *How do we measure objects and time? *How can you tell when one thing is bigger than another? 	
New Concepts		Story Problems/problem solving Number sentence Greater than/less than		3 dimensional shapes Symmetry	Parts of a whole	Place Value Survey			
Lessons, Activities, Tasks	Mathematical Thinking at Grade 1 Investigations #1-5 Touchmath Program	<u>Building Number Sense</u> Investigations #1-4 Computation using: Touchpoints and Fast Facts Addition and Subtraction Tens Frames Kathy Richardson's Book 1 activities for more and less		<u>Quilt Squares and Block Towns</u> Investigation 1: Sessions 1-12 Investigation 2: Session 1 Investigation 3: Sessions 1 & 2 <u>Univ. of GA Geometry &</u>	*fraction packet pulled from various resources *fraction pizzas *work with fraction manipulatives	<u>Number Games and Story Problems</u> *Investigation 2: Sessions 1-12 *Investigation 3: Session 1-13 <u>Survey Questions and Secret Rules</u> Investigation 1: Sessions 1 & 4 *Investigation 2: Sessions 1, 2, 5, 6 *Investigation 3: Sessions 1 & 2		<u>Bigger, Taller, Heavier, Smaller</u> Investigation 1: Sessions 1-6 Investigation 2: Sessions 1-7 Investigation 3: Sessions 1-5	Various lessons with manipulatives, classroom store, telling time & money bingo

				<u>Measurement Unit</u> Lessons 1.01-1.03, 1.19-1.20		*Investigation 4: Sessions 1, 2, & 3 Kathy Richardson activities for place value and problem solving Place Value work with manipulatives,			
Standards 1. Number Sense, Properties, and Operations	1.1.1 Use models to represent whole numbers from 0-100 1.1.2 Count, read, and write whole numbers 0 to 100 1.2.1 Demonstrate addition and subtraction using concrete materials	1.1.2 Count, read, and write whole numbers 0 to 100 1.1.4 Compare and order whole numbers to 100 using <, >, and = 1.1.5 Identify place value and use it to order numbers to 100 1.1.6 Count by 1s, 5s, and 10s to 100 and count by 2s to 20 1.1.7 Starting with any whole number less than 100, count to a given number 1.1.2.1 Demonstrate addition and subtraction using concrete materials 1.2.2 Link addition and subtraction to math terms (add/plus, subtract/take away, and equal) and symbols (+, -, =) 1.2.3 Demonstrate understanding of basic addition sums to 18 and subtraction differences of 10		1.3.3 Identify unit fractions $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{4}$ as parts of wholes or parts of groups 1.3.4 Understand fractions as equal shares or parts		1.1.1 Use models to represent whole numbers from 0-100 1.1.2 Count, read, and write whole numbers 0 to 100 1.1.4 Compare and order whole numbers to 100 using <, >, and = 1.1.5 Identify place value and use it to order numbers to 100 1.1.6 Count by 1s, 5s, and 10s to 100 and count by 2s to 20 1.1.7 Starting with any whole number less than 100, count to a given number 1.2.1 Demonstrate addition and subtraction using concrete materials 1.2.2 Link addition and subtraction to math terms (add/plus, subtract/take away, and equal) and symbols (+, -, =) 1.2.3 Demonstrate understanding of basic addition sums to 18 and subtraction differences of 10			1.3.1 Demonstrate value of nickels, dimes, quarters, and dollars in terms of pennies
2. Patterns, Functions, and Algebraic Structures	2.1.1 Create, extend, and describe patterns using concrete materials								
3. Data, Analysis, Statistics, and Probability						3.1.1 Gather, display, and interpret data using a bar graph, pictograph, or tally charts			
4. Shape, Dimension, and Geometric Relationships				4.1.4 Recognize, describe and make shapes according to given relationships, attributes or properties 4.1.5 Sort geometric figures and describe how they are alike and different 4.1.6 Combine and take apart shapes to create new shapes and describe results				4.2.1 Compare and order objects according to measureable attributes 4.2.2 Measure length with non-standard units 4.2.3 Measure, compare and order length of objects to nearest inch, foot and centimeter 4.2.4 Measure and compare the capacity of a container in cups 4.2.5 Weigh and compare an object on a balance with a non-standard unit 4.2.6 Select	4.1.7 Tell time to the nearest hour and half hour and distinguish units of time (day, night, morning, afternoon, hours) and connect them to common events 4.1.8 Compare and order units of time

							appropriate unit of measurement for length, capacity, and time.	
Resources	<ul style="list-style-type: none"> *Investigations Mathematical Thinking at Grade 1 *Touchpoint Math Program 	<ul style="list-style-type: none"> *Investigations: Building Number Sense *Touchpoints Math Program *Kathy Richardson’s Counting, Comparing and Patterns *Tens Frames *Fast Facts 	<ul style="list-style-type: none"> Quilt Squares and Block Towns Univ. of GA Geometry & Measurement Unit 	<ul style="list-style-type: none"> Scott-Foresman/Addison Wesley Connections – Using Manipulatives in Grade One Day By Day Math Mats 	<ul style="list-style-type: none"> *Math by All Means Place Value by Marilyn Burns *Investigations-Number Games and Story Problems *Investigations- Survey Questions and Secret Rules *Kathy Richardson’s Book 2 and Book 3 	<ul style="list-style-type: none"> Investigations: Bigger, Taller, Heavier, Smaller 	Variety of resources and manipulatives	
Assessments	<ul style="list-style-type: none"> *Beginning of year individual assessments *1:1 Correspondence with 20 objects, BOE task #1, ID and order numbers 1-20, number writing 1-50, beginning computation assessment 	<ul style="list-style-type: none"> *Number Sense I Unit Assessment * Ongoing computation Assessment 	<ul style="list-style-type: none"> *BOE Investigations Task #2 *End of Unit Geometry assessment * Ongoing computation Assessment 	<ul style="list-style-type: none"> *Scott Foresman end of unit assessment * Ongoing computation Assessment 	<ul style="list-style-type: none"> *End of Year Assessment * Ongoing computation Assessment 	<ul style="list-style-type: none"> * Ongoing computation Assessment 	<ul style="list-style-type: none"> * Ongoing computation Assessment 	
Vocabulary	<ul style="list-style-type: none"> Patterns, touchpoints, more, less, fewer, most, same, equal, greater than, less than, sum, total, take away, subtract, add, Strategy language Odd, even 		<ul style="list-style-type: none"> 2-dimensional shapes-triangle, rectangle, circle, oval, trapezoid, rhombus, hexagon, quadrilateral, octagon, 3- dimensional shapes-sphere, cylinder, cube, triangular and rectangular prism, line corner, side, point, open & closed curves, symmetry 	<ul style="list-style-type: none"> Numerator, denominator, whole halves, thirds, fourths 	<ul style="list-style-type: none"> Digit, rename, ones, tens, hundreds, place value, addend, difference, doubles, and strategy “lingo”, estimate, fact families, Data, bar graph, prediction, results, survey Story problem, number sentence, explain your thinking, label 	<ul style="list-style-type: none"> Inch, foot, centimeter, length, capacity, cup 	<ul style="list-style-type: none"> Pennies, nickels, dimes, quarters, dollars, analog, digital, hour 	