

## Chapter 10: Curriculum for Grade 3

### Part A. Correlation of Objectives with Recommended Textbooks

The following pages show how resources from *Investigations in Number, Data, and Space* (“Investigations”) and Scott Foresman Addison Wesley (“SFAW”) align with the TEAM-Math and Alabama Course of Study objectives.

Abbreviations for units in *Investigations in Number, Data, and Space* follow:

- C/C – Combining and Comparing
- ESB – Exploring Solids and Boxes
- FS – Fair Shares
- FTA – Flips, Turns, and Area
- LIH – Landmarks in the Hundreds
- PF – Paces to Feet
- TCG – Things that Come in Groups
- TP – Turtle Paths
- UDNL – Up and Down the Number Line

#### NUMBER STRAND – Grade 3

Alabama Course of Study	TEAM-Math	SFAW	Investigations
1. Demonstrate number sense by comparing, ordering, and expanding whole numbers through 9999. a. Comparing numbers using the symbols $>$ , $<$ , $=$ , and $\neq$ b. Identifying the place value of any digit within a four-digit number c. Writing a four-digit number in words and locating it on a number line d. Determining the value of a number written in expanded notation to the ten-thousands place e. Rounding whole numbers to the nearest ten and hundred and money values to the nearest dollar f. Use coins to make change up to \$1.00. g. Determining monetary values of sets of unlike coins and bills up to \$5.00.	N1. Order, compare. . .		
	a. Compare, order, round, and expand whole numbers to thousands	1:5, 7,8,15; 3:14; 4:15	TCG 1:1, 2 FTA 1:2-5, 2:2-5, TMM PTF 1:2, 2:2 LIH 1:1-3, 2:1-3, 3:1
	b. Demonstrate and understand place value from hundredths to 9999 by using words, models, and pictorial representations, including the use of coins to make change.	1:2, 4, 15	TCG 1:1-2 LIH 1:1-4, 6-7, 2:1-3, 3:1, TMM C/C 1:1, 2; 2:1-2; 3:1,:4:2-4, TMM
	c. Understand the use of decimals when writing dollar amounts	1:10, 12, 13, 15; 3:15	LIH 1:3-4, 6-7, TMM ESB 2:1,3 FS 3:1-2
	d. Demonstrate computational fluency in addition, subtraction	1:2; 2:2, 5, 6, 9; 2:10, 2:13; 3:4, 11, 13; 5:12; 6:11; 10:9	UDNL 1:1-5, 8, TMM C/C 1:1,2; 2:2, 2:1-2; 4:2-4, TMM ESB 5:1-4
	e. Demonstrate computational fluency in basic multiplication and division	5:1, 2, 3, 5, 6, 9, 10, 11, 12; 6:1, 2, 3, 4, 5, 7, 8, 9, 11, 12; 7:4; 9:16; 10:9; 11:5	TCG 3:3-5 C/C 1:1,2; 2:2, 3:1-2; 4:2-4, TMM

	f. Demonstrate and understand addition and subtraction of fractions with like denominators	9-3	TCG 3:3 FS 1:1-4 C/C 5:2-3
2. Solve addition and subtraction problems, including word problems, involving two- and three-digit numbers with and without regrouping. a. Demonstrating computational fluency in addition and subtraction 3. Multiply whole numbers with and without regrouping using single-digit multipliers. a. Applying concepts of multiplication through the use of manipulatives, number stories, arrays, repeated addition, or problem situations b. Applying basic multiplication facts through 9 x 9 by using manipulatives, solving problems, and writing number stories c. Recognizing properties of multiplication N4. Divide whole numbers using two-digit dividends and one-digit divisors. a. Recognizing division as repeated subtraction b. Estimating sums and differences by using compatible numbers, front-end estimation, and rounding	N2. Computation		
	a. Regroup two and three digit numbers in addition and subtraction and multiply two digit numbers by a one digit number	11:1, 6, 7, 8, 10	TCG 3:3-5 LIH 3:2-3 UDNL 1:3, 4, 6, 7
	b. Divide two digit dividends by one digit divisors with and without remainders	7:1, 5, 6, 7, 8, 9, 11, 14; 11:12, 13, 14, 15	FS 2:5, 6
	c. Solve real life problems involving numerical and/or rounding concepts and using estimation, mathematical reasoning, appropriate and non-routine strategies	5:5, 6, 9, 10, 11, 12; 6:1, 2, 3, 4, 5, 7, 8, 9, 11, 12; 7:4; 9:16; 10:9	TCG F:1, 2 FS 1:1-2; 2:1, 2; TMM PTF 1:1-6, TMM LIH 1:6-7; 2:1-6 UDNL 1:3-5; TMM C/C 3:1; 4:1; 5:2-4; TMM TP 1:4; 2:1-6; 3:EXC
	N3. Estimate sums and differences by using compatible numbers and front-end estimation	2:7, 8, 11, 13; 3:11; 6:12	LIH 2:5-6; 3:2-3 C/C TMM TP 2:1-2, 5-6 3:1-5
	N4. Demonstrate number sense by comparing, ordering, and expanding whole numbers	See 1a	LIH Same as # 1
N5. Model equivalent fractions with concrete objects or pictorial representations.	N5. Fractions a. Introduce representations for common fractions of 10 x 10 grids and interpret display as decimals and percents (10 <sup>th</sup> and 100 <sup>th</sup> ) b. Recognize understanding and use of equivalency sentences and fractions	9:3	TCG 5:1, 3 FS 1:1-4; 2:1-7; 3:1-3 FTA 1:2-4; 2:2-5; TMM
	N6. Introduce ratios in problem solving situations		TCG 4:2, 5:1; TMM

## Chapter 10 – Curriculum for Grade 3

**ALGEBRA – Grade 3**

Alabama Course of Study	TEAM-Math	SFAW	Investigations
	A1. Identify properties of operations, such as commutative, associative, and distributive and use them to compute whole numbers, including the inverse relationships between addition/subtraction and multiplication/division		TCG – 3:2, 3; 4:1; 5:4 LIH – 3:2-3; TMM C/C – 1:1, 2; 2:2; 3:1-2; 4:3-4; 5:2-3; TMM
7. Complete a given numeric or geometric pattern.	A2. Complete numeric, geometric, and symbolic patterns	1:9, 6:6, 8; 8:3, 9:11	TCG – 2:1-6; 3:3; TMM LIH – 1:1-4, 6-7; 2:1-3; 3:2-3
	A3. Model problem situations with objects and use representation such as graphs, tables, and equations to draw conclusions	Chapter 2	FTA – 1:2-5; 2:2-5 UDNL – 1:6-7; 2:1-4; 3:1, 2
	A4. Complete an addition or subtraction number sentence with missing addend or subtrahend		LIH – TMM UDNL – 1:6-7

**GEOMETRY – Grade 3**

Alabama Course of Study	TEAM-Math	SFAW	Investigations
8. Identify geometric representations for points, lines, perpendicular lines, parallel lines, angles, and rays. a. Recognizing real-life examples of points, lines, perpendicular lines, and parallel lines b. Drawing points, lines, and perpendicular lines	G1. Identify, compare, classify, and analyze attributes of two and three dimensional shapes:		TCG 2:2-5 TP 2:4, 3:3-5 ESB 1:1-2; 3:1-2
	a. Congruency and similarity	8:9, 10	
	b. Horizontal, vertical, and diagonal lines and line segments	8:4, 5; 4:9	
	c. Lines of symmetry within given shapes	8:10	
	G2. Predict and describe the results of sliding, flipping, and turning two-dimensional shapes	8:9	TCG 1:1-3, 5; 2:2-3 TP 1:2-4, 2:1-2
9. Specify locations on a coordinate grid by using horizontal and vertical movements.	G3. Find the distance between points along horizontal and vertical lines on a coordinate system.	4:9	TCG 5:1 PTF 1:1-6; 2:1-2 UDNL 2:1-4 TP 2:1-2, 4
	G4. Describe location and movement using common language and geometric vocabulary	Chapter 8	TP 2:1-6; 3: EXC
	G5. Build and draw geometric shapes	Lesson 8-1, 3, 4, 9	FTA 1:1-3; 2:2-1-5 TP 2:3-6; 3:1-5 ESB 2:1-5; 3:1, 2; 4:2
	G6. Problem solving using geometric models in other areas of mathematics		TP 1:1-4, TMM; 2:1-2 ESB 2:1, 3-5; 3:2; 4:3; 5:1-4

**MEASUREMENT – Grade 3**

Alabama Course of Study	TEAM-Math	Scott Foresman w/ Investigations	Investigations
10. Measure length in metric units.	M1. Understand the need for measuring with standard units and become familiar with standard units in the customary and metric systems	10:6, 7; Chapter 8	FS 1:1, 2; 2:7 FTA 2:1, 4, 5 PTF 00 1:1-4; 2:1-4; 3:1-3; 4:1-3
	M2. Select and apply appropriate units and tools of measurement based on given attributes (length, area, weight, volume)	Chapter 5 Chapter 6	FS 1:3-4 FTA 1:1-3, 2:1-5 PTF 1:5-6, 2:1, 3-5, 6-7; 3:1-3; 4:1-3 TP 2:1-2; 2:4
	M3. Carry out simple unit conversions (cm-m) within a system	Chapter 4 Chapter 8	FS 1:3-4 PTF 1:1, 2; 2:2, 6-7; 3:2-3
11. Determine elapsed time to the day with calendars and to the hour with a clock. <ul style="list-style-type: none"> <li>• Calculating elapsed time the minute within the same hour</li> <li>• Applying vocabulary associated with time using <i>a.m.</i>, <i>p.m.</i>, <i>noon</i>, or <i>midnight</i></li> </ul>	M4. Find and estimate perimeter and area of given geometric shapes	8:11, 12	FTA 1:4-5 PTF 1:1-4 TP 3:1-2, 6-7, TMM
	M5. Solve problems involving elapsed time, temperature, spatial reasoning, and calendar concepts	4:1, 3, 15	TCG 3:1-3 FS 2:1-2, 4-7; 3:1-2 FTA 1:1-5 C/C 3:2; 5:1-3 ESB 2:1, 3, TMM

**DATA ANALYSIS AND PROBABILITY – Grade 3**

Alabama Course of Study	TEAM-Math	SFAW	Investigations
	D1. Collect and represent data using a variety of tables, graphs, and charts	Chapter 2	TCG 4:2; 5:1, TMM PTF 1:1-2, 5-6; 2:1-7; 3:2-3 C/C 2:2; 4:1, 2; 5:2-3; TMM UDNL 2:1-3
12. Recognize data as either categorical or numerical. <ul style="list-style-type: none"> <li>a. Comparing related data sets</li> </ul>	D2. Recognize data as either categorical or numerical	Chapter 2	PTF 1:1-2, 5-6; 2:1-7; 3:2-3 C/C 2:2; 4:1, 2; 5:2-3 UDNL 2:1-3
13. Determine the likelihood of different outcomes in a simple experiment.	D3. Predict the probability of outcomes of simple experiments and test the predictions.	Chapter 7	FTA 1; 2:2-5 UDNL 2:1-3 C/C 2:2; 4:1,2; 5:2-3 ESB 4:1; 5:1-4, 4:2