



Transforming East Alabama Mathematics

The East Alabama Partnership for the Improvement of Mathematics Education

TEXTBOOK REVIEW

Grade 2

PHASE II

Reviewer: _____ School/District: _____

Title/Publisher: _____

Copyright Date: _____ Date Reviewed: _____

ONLY REVIEW TEXTBOOKS RECOMMENDED IN PHASE I.

The following sheets include the TEAM-Math objectives correlated with the Alabama Course of Study. Rate each objective on the following scale:

- 1 = Does not address the objective
- 2 = Partially addresses the objective
- 3 = Addresses the objective at an adequate level
- 4 = Addresses the objective at an exemplary level

Also, note the page number(s) on which attention to the objective is included.

NUMBER STRAND – Grade 2

Score	TEAM-Math	Alabama Course of Study
<p>1 2 3 4</p>	<p>1. Extend an understanding of place value/base 10 to:</p> <ul style="list-style-type: none"> a. Develop an understanding and use of expanded notation b. Count by multiples to 100 including 3's c. Know the value of 100 more or 100 less d. Represent whole numbers to 1000 e. Develop an understanding of the relationship between ordinal numbers and cardinal numbers f. Use models to develop and explain the value of a 3-digit number g. Determine the monetary value of sets of coins and bills up to \$5.00 	<p>1. Demonstrate concepts of number sense by using multiple representations of whole numbers up to 1000, counting forward and backward by threes from a given number, identifying a number that is 100 more or 100 less than a given number, and differentiating between odd and even numbers.</p> <ul style="list-style-type: none"> • Identifying position using ordinal numbers to 100th • Determining the value of a digit in the ones, tens, hundreds, and thousands place • Determining the value of a number expressed in expanded notation <p>4. Determine the monetary value of sets of coins and bills up to \$2.00.</p> <ul style="list-style-type: none"> • Exchanging coins of equivalent value • Applying monetary symbols, including dollar (\$), cent (¢), and decimal point (.) • Recognizing the decimal numbers .10, .25, .50, and .75 as related to money
<p>1 2 3 4</p>	<p>2. Extend an understanding of the operations of addition and subtraction to:</p> <ul style="list-style-type: none"> a. Develop computational fluency with sums through 18 and differences with minuends through 18 b. Solve problems using separation (take-away), comparison (finding the difference), and part-whole (missing addends) c. Use two or three digit addition and subtraction to solve problems d. Model and explain multiplication as repeated addition with manipulatives, pictures, and symbols e. Model division as equal groupings with manipulatives, pictures, and symbols f. Solve story problems and distinguish relevant/irrelevant information 	<p>2. Apply the operations of addition and subtraction to solve problems involving two-digit numerals, using multiple strategies with and without regrouping.</p> <ul style="list-style-type: none"> • Demonstrating computational fluency for basic addition and subtraction facts with sums through 18 and differences with minuends through 18, using horizontal and vertical forms • Interpreting multiplication as repeated addition and division as equal groupings • Solving multi-step addition and subtraction problems originating from real-life experiences • Justifying the strategy used to solve addition and subtraction problems • Using an estimate to determine if an answer is reasonable
<p>1 2 3 4</p>	<p>3. Demonstrate an understanding of fractions to:</p> <ul style="list-style-type: none"> a. Label parts of a whole using fraction notation including $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$ b. Transfer fraction representation from one form to another c. Identify parts of a set as a fractional ratio(3 parts out of 4) d. Represent parts of a whole as a quotient using real life situations (2 cookies divided among 4 people) 	<p>3. Label equal parts of a whole using $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$.</p>

ALGEBRA STRAND – Grade 2

Score	TEAM-Math	Alabama Course of Study
1 2 3 4	1. Apply an understanding of patterns, relations, and functions to: <ol style="list-style-type: none"> a. Interpret and explain numeric patterns <ul style="list-style-type: none"> • Sequence addition (If $32+18=50$ and $33+18=51$, what would $35+18$ be?) • Paired subtraction (If $24-15=9$, what is $24-16$?) b. Use mathematical models to represent and understand quantitative relationships c. Identify missing elements in given patterns d. Extend a growing pattern 	5. Create growing patterns. Examples: \square , $\square\square$, $\square\square\square$; a b, a a b, a a a b
1 2 3 4	2. Extend use and understanding of number sentences using algebraic symbols: <ol style="list-style-type: none"> a. Apply concepts of $>$ and $<$ b. Introduce concepts of \times and $/$ c. Solve problems using associative and commutative properties d. Solve missing addend problems 	6. Solve problems using the associative property of addition.
1 2 3 4	3. Describe change over time (qualitative and quantitative)	7. Describe change over time in observable (qualitative) and measurable (quantitative) terms. Examples: recognizing that a plant grew taller (qualitative, requiring observation); recognizing that a plant grew three inches (quantitative, requiring measurement)

GEOMETRY STRAND – Grade 2

Score	TEAM-Math	Alabama Course of Study
1 2 3 4	1. Analyze geometric relationships using 2D and 3D geometric shapes to: <ol style="list-style-type: none"> a. Describe attributes of 2-dimensional (plane) and 3-dimensional (solid) figures using terms: side, surface, edge, vertex, angle b. Categorize 2D and 3D shapes and explain groupings according to the properties c. Predict the results of putting together and taking apart 2D and 3D shapes 	8. Describe attributes of two-dimensional (plane) and three-dimensional (solid) figures using the terms <i>side</i> , <i>surface</i> , <i>edge</i> , <i>vertex</i> , and <i>angle</i> . <ul style="list-style-type: none"> • Identifying quadrilaterals, pentagons, hexagons, or octagons
1 2 3 4	2. Apply concepts of positions, directions, and distance to: <ol style="list-style-type: none"> a. Describe the route from one location to another b. Follow multi-step directions to locate objects c. Create and read simple maps d. Use grids to show movement between intersecting points 	9. Describe the route from one location to another by applying concepts of direction and distance. Examples: direction—left, right, north, south, east, west; distance (nonstandard)—twenty-five steps from the library; distance (standard)—ten feet from the walkway <ul style="list-style-type: none"> • Following multi-step directions to locate objects • Reading maps of the school environment • Using grids for movement between points
1 2 3 4	3. Analyze mathematical situations by applying transformations and using symmetry to: <ol style="list-style-type: none"> a. Apply slides, flips, or turns to create designs that exhibit line symmetry b. Recognize and create lines of symmetry using everyday objects and geometric figures 	<ul style="list-style-type: none"> • Identifying line symmetry in plane geometric figures • Creating designs that exhibit line symmetry • Recognizing the results of changing the position (transformation) of objects or shapes by sliding (translation), turning (rotation), or flipping (reflection)
1 2 3 4	4. Use visualization and spatial reasoning to: <ol style="list-style-type: none"> a. Create mental images of geometric shapes using spatial memory and visualization b. Recognize and represent shapes from a different perspective (puzzles) c. Locate shapes and structures in the environment 	

MEASUREMENT STRAND – Grade 2

Score	TEAM-Math	Alabama Course of Study
1 2 3 4	<p>1. Apply appropriate techniques, tools and formulas in measurement to:</p> <ol style="list-style-type: none"> Measure using nonstandard, standard customary and metric units Understand the comparison of customary units and metric units to familiar objects Demonstrate use of customary and metric units in linear measurement Compare and order objects according to related attributes of weight, area, length and volume 	<p>10. Measure length in customary units, including inches, feet, and yards.</p> <ul style="list-style-type: none"> Using metric units Using appropriate tools, including rulers, yard sticks, meter sticks, or tape measures <p>11. Estimate weight and capacity by making comparisons with familiar objects. Examples: a desk weighing more than a pencil, a cup holding less than a bucket</p>
1 2 3 4	<p>2. Tell time to the minute using analog and digital clocks</p> <ul style="list-style-type: none"> Hour, half hour, quarter, 5 minutes (intervals) Elapsed time <p>3. Compare everyday experiences to reinforce concepts of time (Example: It takes about the same amount of time to watch a movie as it does to watch a football game.)</p>	<p>12. Tell time to the minute using analog and digital clocks.</p>

DATA ANALYSIS AND PROBABILITY STRAND – Grade 2

Score	TEAM-Math	Alabama Course of Study
1 2 3 4	<p>1. Collect, organize, and display data in multiple ways from self-generated questions to:</p> <ol style="list-style-type: none"> Use multiple display models (yes/no charts; single, double, and double over-lapping Venn Diagrams; circle graphs; vertical/horizontal bar graphs, frequency tables; tallies; and other models) Organize, plan, collect, and interpret data to answer self-generated questions or to make decisions Recognize patterns in data collected Represent data in multiple ways 	<p>13. Create displays, including appropriate labels, for a given set of data using pictographs, tally charts, bar graphs, or single- or double-loop Venn diagrams.</p> <ul style="list-style-type: none"> Interpreting graphic displays
1 2 3 4	<p>2. Communicate events and outcomes in appropriate probability terminology (certain, likely, equally likely, unlikely, possible, impossible, fair)</p>	<p>14. Determine if one event related to everyday life is more likely or less likely to occur than another event. Example: determining if it is more likely to rain or snow on July 4th in Alabama</p>
1 2 3 4	<p>3. Evaluate and redefine predictions using cognitive benchmarks</p>	

Publisher/Title: _____

Phase II Summary

Overall holistic score: 1 2 3 4

Rationale for your score, including strengths and weaknesses of the content covered by the program.