TEXTBOOK REVIEW FORM

MATHEMATICS

GRADE 4

Textbook/Series: _____

Edition: _____ Copyright: _____ Publisher: _____

Reviewed by: _____

This form was based in part on:

A project of
The Charles A. Dana Center
At the University of Texas at Austin

Adapted for Alabama State Department of Education

STANDARDS FOR MATHEMATICAL PRACTICE – MATHEMATICS – GRADE K-12 – OVERALL

Textbook/Series: _____

Edition: _____ Copyright: _____ Publisher: _____

OVERALL RATING:	Weak (1-2) Moderate (2-3) Strong (3-4)	**Comments:**	
1. Make sense of problems and preserve in solving them. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	2. Reason abstractly and quantitatively. **Summary/Justification/Evidence**	Weak (1-2) Moderate (2-3) Strong (3-4)
3. Construct viable arguments and critique the reasoning of others. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	4. Model with mathematics. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)
5. Use appropriate tools strategically. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	6. Attend to precision. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)
7. Look for and make use of structure. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	8. Look for and express regularity in repeated reasoning. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)

Weak: This is the lowest rating a book can receive. In general, a book that was rated as "weak" scored mostly 1s and 2s on a 4-point scale.

Moderate: This is the middle rating a book can receive. In general, a book that was rated as "moderate" scored mostly 2s and 3s on a 4-point scale.

S**trong**: This is the highest rating a book can receive. In general, a book that was rated as "strong" scored mostly 3s and 4s on a 4-point scale.

Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

1. Make sense of problems and persevere in solving them.

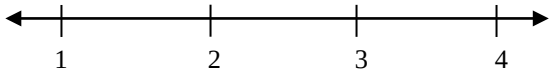
These students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. These students consider analogous problems and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to obtain the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solve complex problems and identify correspondences between different approaches.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

2. Reason abstractly and quantitatively.

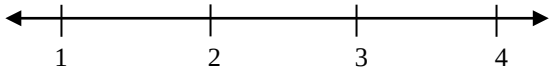
Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships. One is the ability to *decontextualize*, to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents. The second is the ability to *contextualize*, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

3. Construct viable arguments and critique the reasoning of others.

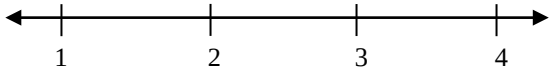
These students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. These students justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments; distinguish correct logic or reasoning from that which is flawed; and, if there is a flaw in an argument, explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until the middle or upper grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen to or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

4. Model with mathematics.

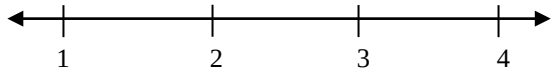
These students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, students might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, students might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts, and formulas and can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

5. Use appropriate tools strategically.

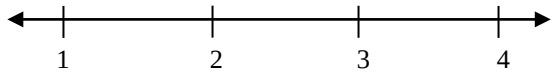
Mathematically proficient students consider available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a Web site, and use these to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

6. Attend to precision.

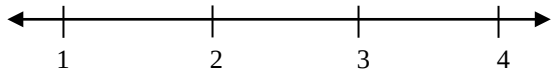
These students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. Mathematically proficient students are careful about specifying units of measure and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, and express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

7. Look for and make use of structure.

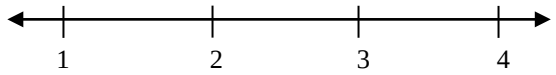
Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well-remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. These students also can pause and reflect for an overview and shift perspective. They can observe the complexities of mathematics, such as some algebraic expressions as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

8. Look for and express regularity in repeated reasoning.

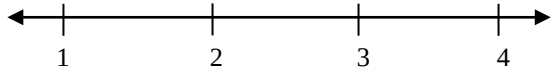
They notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y – 2)/(x – 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x – 1)(x + 1)$, $(x – 1)(x^2 + x + 1)$, and $(x – 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As students work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details and continually evaluate the reasonableness of their intermediate results.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



TEXTBOOK REVIEW FORM – MATHEMATICS – OVERALL
MATHEMATICAL STANDARDS & OTHER CRITERIA – GRADE 4

Textbook/Series: _____

Edition: _____ Copyright: _____ Publisher: _____

OVERALL RATING:	Weak (1-2) Moderate (2-3) Strong (3-4)	Important Mathematical Ideas: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)
Skills and Procedures: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	Mathematical Relationships: **Summary/Justification/Evidence**	Weak (1-2) Moderate (2-3) Strong (3-4)
Content: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	Instruction: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)
Assessment: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	Technology: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)

Weak: This is the lowest rating a book can receive. In general, a book that was rated as "weak" scored mostly 1s and 2s on a 4-point scale.

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Operations and Algebraic Thinking

Solve problems with whole numbers using the four operations.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
1. Interpret and write equations for multiplicative comparisons. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Operations and Algebraic Thinking

Solve problems with whole numbers using the four operations.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
2. Solve word problems involving multiplicative comparison using drawings and write equations to represent the problem, using a symbol for the unknown number. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Operations and Algebraic Thinking

Solve problems with whole numbers using the four operations.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
3. Determine and justify solutions for multi-step word problems, including problems where remainders must be interpreted. a. Write equations to show solutions for multi-step word problems with a letter standing for the unknown quantity. b. Determine reasonableness of answers for multi-step word problems, using mental computation and estimation strategies including rounding. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Operations and Algebraic Thinking

Gain familiarity with factors and multiples.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
4. For whole numbers in the range 1 to 100, find all factor pairs, identifying a number as a multiple of each of its factors. a. Determine whether a whole number in the range 1 to 100 is a multiple of a given one-digit number. b. Determine whether a whole number in the range 1 to 100 is prime or composite. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Operations and Algebraic Thinking

Generate and analyze patterns.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5. Generate and analyze a number or shape pattern that follows a given rule. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Operations with Numbers: Base Ten

Generalize place value understanding for multi- digit whole numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
6. Using models and quantitative reasoning, explain that in a multi-digit whole number, a digit in any place represents ten times what it represents in the place to its right. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Operations with Numbers: Base Ten

Generalize place value understanding for multi- digit whole numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7. Read and write multi-digit whole numbers using standard form, word form, and expanded form. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Operations with Numbers: Base Ten

Generalize place value understanding for multi- digit whole numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
8. Use place value understanding to compare two multi-digit numbers using >, =, and < symbols. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Operations with Numbers: Base Ten

Generalize place value understanding for multi- digit whole numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
9. Round multi-digit whole numbers to any place using place value understanding. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Operations with Numbers: Base Ten

Use place value understanding and properties of operations to perform multi-digit arithmetic with whole numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
10. Use place value strategies to fluently add and subtract multi-digit whole numbers and connect strategies to the standard algorithm. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Operations with Numbers: Base Ten

Use place value understanding and properties of operations to perform multi-digit arithmetic with whole numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
11. Find the product of two factors (up to four digits by a one-digit number and two two-digit numbers), using strategies based on place value and the properties of operations. a. Illustrate and explain the product of two factors using equations, rectangular arrays, and area models. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Operations with Numbers: Base Ten

Use place value understanding and properties of operations to perform multi-digit arithmetic with whole numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
12. Use strategies based on place value, properties of operations, and/or the relationship between multiplication and division to find whole-number quotients and remainders with one-digit divisors and up to four-digit dividends. a. Illustrate and/or explain quotients using equations, rectangular arrays, and/or area models. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Operations with Numbers: Fractions

Extend understanding of fraction equivalence and ordering.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
13. Using area and length fraction models, explain why one fraction is equivalent to another, taking into account that the number and size of the parts differ even though the two fractions themselves are the same size. a. Apply principles of fraction equivalence to recognize and generate equivalent fractions. *Example:* $\frac{a}{b}$ *is equivalent to* $\frac{n \times a}{n \times b}$.	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating 1 2 3 4

Operations with Numbers: Fractions

Extend understanding of fraction equivalence and ordering.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
14. Compare two fractions with different numerators and different denominators using concrete models, benchmarks (0, ½, 1), common denominators, and/or common numerators, recording the comparisons with symbols >, =, or <, and justifying the conclusions. a. Explain that comparison of two fractions is valid only when the two fractions refer to the same whole. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Operations with Numbers: Fractions

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
15. Model and justify decompositions of fractions and explain addition and subtraction of fractions as joining or separating parts referring to the same whole. a. Decompose a fraction as a sum of unit fractions and as a sum of fractions with the same denominator in more than one way using area models, length models, and equations. b. Add and subtract fractions and mixed numbers with like denominators using fraction equivalence, properties of operations, and the relationship between addition and subtraction. c. Solve word problems involving addition and subtraction of fractions and mixed numbers having like denominators, using drawings, visual fraction models, and equations to represent the problem. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Operations with Numbers: Fractions

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
16. Apply and extend previous understandings of multiplication to multiply a whole number times a fraction. a. Model and explain how a non-unit fraction can be represented by a whole number times the unit fraction. *Example:* $\frac{9}{8} = 9 \times \frac{1}{8}$ b. Extend previous understanding of multiplication to multiply a whole number times any fraction less than one. *Example:* $4 \times \frac{2}{3} = \frac{4 \times 2}{3} = \frac{8}{3}$ c. Solve word problems involving multiplying a whole number times a fraction using visual fraction models and equations to represent the problem. *Examples:* $3 \times \frac{1}{2}$, $6 \times \frac{1}{8}$	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating 1 2 3 4

Operations with Numbers: Fractions

Understand decimal notation for fractions, and compare decimal fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
17. Express, model, and explain the equivalence between fractions with denominators of 10 and 100. a. Use fraction equivalency to add two fractions with denominators of 10 and 100. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Operations with Numbers: Fractions

Understand decimal notation for fractions, and compare decimal fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
18. Use models and decimal notation to represent fractions with denominators of 10 and 100. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Operations with Numbers: Fractions

Understand decimal notation for fractions, and compare decimal fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
19. Use visual models and reasoning to compare two decimals to hundredths (referring to the same whole), recording comparisons using symbols >, =, or <, and justifying the conclusions. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Data Analysis

Represent and interpret data.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
20. Interpret data in graphs (picture, bar, and line plots) to solve problems using numbers and operations. a. Create a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$). b. Solve problems involving addition and subtraction of fractions using information presented in line plots. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Measurement

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
21. Select and use an appropriate unit of measurement for a given attribute (length, mass, liquid volume, time) within one system of units: metric - km, m, cm; kg, g, l, ml; customary - lb, oz; time - hr, min, sec. a. Within one system of units, express measurements of a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Measurement

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
22. Use the four operations to solve measurement word problems with distance, intervals of time, liquid volume, mass of objects, and money. a. Solve measurement problems involving simple fractions or decimals. b. Solve measurement problems that require expressing measurements given in a larger unit in terms of a smaller unit. c. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Measurement

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
23. Apply area and perimeter formulas for rectangles in real-world and mathematical situations. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Measurement

Geometric measurement: understand concepts of angle and measure angles.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
24. Identify an angle as a geometric shape formed wherever two rays share a common endpoint. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Measurement

Geometric measurement: understand concepts of angle and measure angles.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
25. Use a protractor to measure angles in whole-number degrees and sketch angles of specified measure. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Geometric measurement: understand concepts of angle and measure angles.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
26. Decompose an angle into non-overlapping parts to demonstrate that the angle measure of the whole is the sum of the angle measures of the parts. a. Solve addition and subtraction problems on a diagram to find unknown angles in real-world or mathematical problems. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Geometry

Draw and identify lines and angles, and identify shapes by properties of their lines and angles.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
27. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines, and identify these in two-dimensional figures. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Geometry

Draw and identify lines and angles, and identify shapes by properties of their lines and angles.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
28. Identify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size. a. Describe right triangles as a category, and identify right triangles. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Geometry

Draw and identify lines and angles, and identify shapes by properties of their lines and angles.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
29. Define a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. a. Identify line-symmetric figures and draw lines of symmetry. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITIERIA AND INDICATORS

Documenting Alignment to
Additional Criteria and Indicators

Content

Criteria and Indicators	**Summary and documentation of how the additional criteria and indicators are met. Cite examples from the materials.**
1. Content is designed for students of varied abilities and understanding.	**Overall Rating** 1 2 3 4
2. Content is free of bias and/or controversial information.	**Overall Rating** 1 2 3 4
3. Content includes strategies for vocabulary instruction and graphic organizers.	**Overall Rating** 1 2 3 4
4. Content includes assignments that encourage integration of other content areas to support a math concept/skill.	**Overall Rating** 1 2 3 4
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITIERIA AND INDICATORS

Documenting Alignment to
Additional Criteria and Indicators

Technology

Criteria and Indicators	**Summary and documentation of how the additional criteria and indicators are met. Cite examples from the materials.**
1. Technology support and suggestions for appropriate use of multimedia resources are provided.	**Overall Rating** 1 2 3 4
2. Technology is integrated with student activities so that students collect, organize, analyze, and present data.	**Overall Rating** 1 2 3 4
3. Textbook and supplemental Contents are available online and/or on CD-ROM.	**Overall Rating** 1 2 3 4
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITIERIA AND INDICATORS

Documenting Alignment to
Additional Criteria and Indicators

Assessment

Criteria and Indicators	**Summary and documentation of how the additional criteria and indicators are met. Cite examples from the materials.**
1. Some assessments are designed to measure student understanding above the knowledge level.	**Overall Rating** 1 2 3 4
2. Guidance is provided to teacher regarding how assessment information can be used to inform instruction.	**Overall Rating** 1 2 3 4
3. Rubrics are provided for grading some assignments.	**Overall Rating** 1 2 3 4
4. Some opportunities are provided for students to check their own understanding.	**Overall Rating** 1 2 3 4
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

Documenting Alignment to
Additional Criteria and Indicators

Assessment (Continued)

Criteria and Indicators	Summary and documentation of how the additional criteria and indicators are met. Cite examples from the materials.
5. Assessment activities examine the extent to which students can apply information to situations that require reasoning and creative thinking.	**Overall Rating** 1 2 3 4
6. Multiple means of assessments are used, informal as well as formal.	**Overall Rating** 1 2 3 4
7. Conceptual understanding and procedural knowledge are frequently assessed through tasks that ask students to apply information about a given concept in novel situations.	**Overall Rating** 1 2 3 4
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITIERIA AND INDICATORS

Documenting Alignment to
Additional Criteria and Indicators

Instruction

Criteria and Indicators	**Summary and documentation of how the additional criteria and indicators are met. Cite examples from the materials.**
1. Teacher guide provides suggestions for how to demonstrate/model skills or use of knowledge.	**Overall Rating** 1 2 3 4
2. Teacher guide offers alternative instructional strategies for advanced learners, struggling learners, ELL and Sp. Ed.	**Overall Rating** 1 2 3 4
3. Teacher guide suggests multiple opportunities for students to demonstrate understanding.	**Overall Rating** 1 2 3 4
4. Teacher guide provides opportunities for guided practice and scaffolded support.	**Overall Rating** 1 2 3 4
5. Teacher guide includes suggestions to diagnose student errors, explanations of how these errors may be corrected, and how to further develop student ideas.	**Overall Rating** 1 2 3 4
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**