



# Mathematics Materials Survey



Name of Text/Material: \_\_\_\_\_ Class: \_\_\_\_\_

Author(s): \_\_\_\_\_

Publisher: \_\_\_\_\_

Copyright: \_\_\_\_\_

**Available Supporting Materials:**

- Teacher's Guide
- Manipulatives
- Student Text Available in Alternate Language: \_\_\_\_\_
- Adaptations/Scaffolds for Diverse Learners
- Web-Based Student/Parent/Teacher Support
- Parent Resources
- Assessment Resources
- Other(s); \_\_\_\_\_
- Electronic Format of Student Text (CD or E-text )
- Supplemental Practice & Extension Activities

**I. Overall Structure of the Book:**

- Table of Contents  Yes  No
- Glossary of Math terms, symbols, formulas  Yes  No
- Index  Yes  No
- Appendix/Supplemental Examples  Yes  No

**II. Overall Content** (Circle your response)

	Yes	Sometimes	No
1. Does the content of the text what are feel/know are the essential concepts, learner outcomes and standards in your math course/curriculum?	Y	S	N
2. Examine the topics presented in each chapter/booklet. Does the content flow in a logical progression, from simple to complex?	Y	S	N
3. Does the text reflect the logical progression of mathematical concepts, skills and standard development you feel are appropriate based on knowledge of the district, state and NCTM standards and your experience/training?	Y	S	N

**III, Organization of Chapters** (Circle Your Response)

1. Do the topics and subtopics specify the main ideas of the chapter?	Y	S	N
2. Does the author begin each chapter /unit with a general introduction/overview of the topic with rationale for its use?	Y	S	N
3, Is the "big idea" or key concepts to be learned/applied included in the introduction?	Y	S	N
4 . At the end of the section/chapter does the other review essential concepts and big ideas.	Y	S	N

5. Are there review sections included in each chapter. If so, are these keyed to the specific chapter sections so that students can review concepts they may not have understood?	Y	S	N
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6. Does the author use text features to enhance importance and understanding of concepts, process and vocabulary (boxes, color, highlighting, italics, marginal notes, etc.) _____	Y	S	N
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**IV. Content within Chapters**

1. Does the text provide clear definitions of technical vocabulary? _____ within text    ___ with visuals    _____ symbolically	Y	S	N
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2. Are their other types of everyday and math specific vocabulary which may cause confusion when used in the chapter context?	Y	S	N
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3. Does the author introduce a new concept with adequate enough examples appropriate to content,so that concept is comprehensible?	Y	S	N
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4. In introducing a new concept, does the author use motivational devices (practical examples, age/appropriate interests, cartoons, humor)?	Y	S	N
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5. When appropriate does the text provide practical real-life examples and active application practice of math concepts?	Y	S	N
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6. Are the mathematical practice activities/exercises sufficient to build understanding?	Y	S	N
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7. Do the practice activities build from simpler to more difficult problems/activities?	Y	S	N
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**V. Sentence Level**

1. Is the sentence structure clear and concise?	Y	S	N
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2. Are most verbs in the active voice?	Y	S	N
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3. Does the author use text signals to support understanding? (First, next; Consequently, etc.)	Y	S	N
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4. Does the author use emphasis words to indicate important concepts? (most of all, a significant factor, etc.)	Y	S	N
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5. Does the author use explicit text/word signals to indicate comparisons ? (but, however, on the other hand, etc.)	Y	S	N
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6. Does the author use explicit text/word signals to indicate illustrative examples ?( for example, such as, etc.)	Y	S	N
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7. Does the author use explicit text/word signals for conclusions? (therefore, as a result, etc.)	Y	S	N
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**VI. Concept Development**

- |  |   |   |   |
|--|---|---|---|
| 1. Are the new concepts clearly linked to student's prior knowledge?           | Y | S | N |
| 2. Are the concepts first defined, then followed with clear examples?          | Y | S | N |
| 3. Are the concepts clearly defined and discussed with sufficient elaboration? | Y | S | N |

**VII. Vocabulary Density**

1. Count out 2 100 word selections from your math text. For each selection circle all vocabulary words/terms which might be unfamiliar to some or most of your students. Then count the number of circled words and record them below. Mathematical symbolic language terms (notations, formulas, etc.) are classified as vocabulary.

**Number of Unfamiliar Words and Symbols**

- Selection 1: \_\_\_\_\_
- Selection 2: \_\_\_\_\_

If the total of either selection is five or more words, the vocabulary demands will likely create some problems for some of your students.

**VIII. Context Clues**

1. From the 2 selections above, analyze your circled words to determine how they are supported and reinforced in the text/book. Examine how the author uses context to develop understandings of these words or symbols. Evaluate whether or not they are explained clearly in a way that students will understand (clearly and consistently) these terms/concepts. (Direct Definitions with Examples; Restatements, Inferences)

- |   | Selection 1 | Selection 2 |
|---|-------------|-------------|
| <input type="checkbox"/> Total # of Unfamiliar Words in Selection | _____       | _____       |
| <input type="checkbox"/> # of Words Developed Through Context     | _____       | _____       |

**Types of Context Clues Used In Text**

- |  | Selection 1 | Selection 2 |
|--|-------------|-------------|
| <input type="checkbox"/> # of Direct Definitions with Examples | _____       | _____       |
| <input type="checkbox"/> # Of Direct Definitions Alone         | _____       | _____       |
| <input type="checkbox"/> # of Examples Alone                   | _____       | _____       |
| <input type="checkbox"/> # of Restatement(s)                   | _____       | _____       |
| <input type="checkbox"/> # of Inferences                       | _____       | _____       |
| <input type="checkbox"/> # of Other                            | _____       | _____       |

## Mathematics Materials Survey Summary

### Supporting Materials & Structure

Strengths	Snags	Considerations for Diverse Learners & Literacy

*Considerations:* Material Supplements/Supports, Structure of Book/Material - Index, Glossaries, Table of Contents, etc.

### Overall Content

Strengths	Snags	Considerations for Diverse Learners & Literacy

*Considerations:* Standards Addressed, Topics Covered, Progression of Topics

### Organization of Chapter/Materials

Strengths	Snags	Considerations for Diverse Learners & Literacy

*Considerations:* Clear Topics, Clarity of Big /Key Ideas, Introductory Information, Review, Supportive Text Enhancements in Chapters

### Chapter Content

Strengths	Snags	Considerations for Diverse Learners & Literacy

*Considerations:* Vocabulary Definitions, Concept Introduction, Sufficient Examples, Real Life Applications, Practice Activities, Simple to Complex Exemplars

### Literacy Load

Strengths	Snags	Considerations for Diverse Learners & Literacy

*Considerations:* Sentence Level, Concept Development Vocabulary Density, Context Clues

Adapted from Santa, 1988. Santa, C. (1988). *Content reading involving study systems: Reading, writing and studying across the curriculum*. Dubuque, IA: Kendall Hunt.