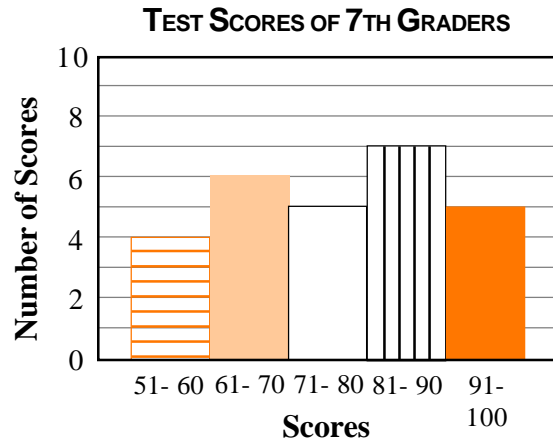
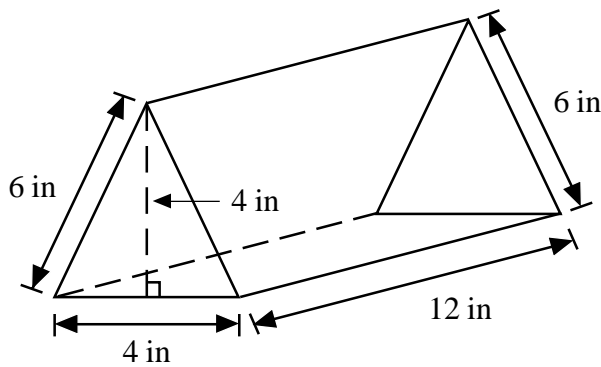


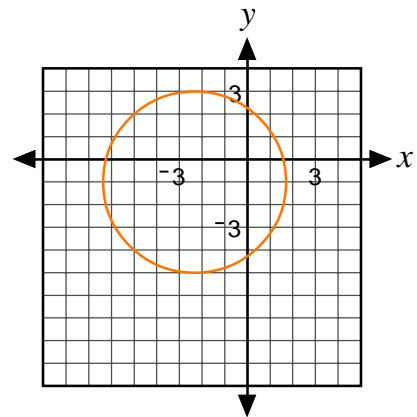
Student's Name _____

Successful Test Taking[®]

MATHEMATICS 7



$$20x + 14 = 8x + 62$$



LEADERSHIP RESOURCES[®]

2011 Edition

Successful Test Taking Mathematics 7

Dear Educator:

This sample represents only a portion of the **LEADERSHIP RESOURCES®** Successful Test Taking® Mathematics 7 preparation book (2011 Edition).

The actual book is 48 pages and has 75 multiple-choice and 25 gridded-response items. Questions are aligned with all Next Generation Sunshine State Standards and Benchmarks. The questions are written to the 2009 Item Specifications. The book is printed on newsprint, is consumable, and is sold in a set of 25 books for \$60.00.

Also included in this sample are two pages of the teacher's guide. The teacher's guide identifies the specific benchmark each question assesses.

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Successful Test Taking[®]

Mathematics 7

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Successful Test Taking[®]

Preface

This test taking book has been developed to help you take a mathematics test, as well as review strategies you already use in math.

A good test:

- A. confirms what you already know,
- B. helps you to see where you can use what you know,
- C. shows you new ideas while taking the test.

Please note that this book was made to help you learn how to prepare for and take tests. It is **not**, however, a complete model of the FCAT. This book was developed to provide you with typical items that might be tested.

Test taking is complicated. By studying tests and how they are written, you can become a better test taker. The reading and mathematics strategies you use in the classroom and in daily life can be used here as well.

As you use this book, try to do your best work. Doing your best work is a mirror of your ability and effort.

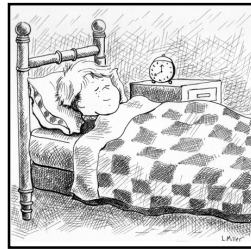
**Remember to
Use your Common Sense**

Test Taking Tips

Here are some helpful hints.

I. Before coming to school on test days:

- A. **Get some rest.** It's not very smart to try to do your best work when you are tired.



- B. **Eat something** in advance, such as cereal, toast, or fruit, and have some milk or fruit juice. You already know that a good breakfast will give you the energy you need to do well in school.



- C. **Come prepared.** You may be provided with a pencil that has an eraser, but bring one anyway. Also, bring a book or magazine to entertain yourself if you finish the test early.

- D. **Arrive on time.** Tests take energy. Don't spend all your energy rushing to get to school on time. Allow yourself plenty of time to get to school on test days.

II. When you get to school on test days:

- A. Find a comfortable place to work.
This may mean not sitting next to your friends. Remember, your goal is to do your best on the test. Sit where you can concentrate and do well.
- B. Follow along when the teacher gives the test directions. Ask your teacher to explain the directions if you do not understand them.
- C. Some tests are confusing. You may know the answer, but you must correctly fill in the bubble or the grid to get credit for your answer.
- D. Unless your teacher tells you otherwise, **mark in the test book**. Most test books will not be used again, so mark away! Do any work you need to right on the test book pages.
- E. Don't waste all of your time on one item. It is OK to skip an item and return to it later. Make it easy to find the item you skipped by circling the number of the item in the test book.
- F. If you come across an item that just seems impossible, skip it and move on. But don't give up on the whole test altogether. Some test writers put in very hard items at first. Don't let them discourage you when they do this. Keep going!
- G. For multiple-choice items, mark the **best** answer. If you are not sure of an answer, guess wisely. But don't mark just any answer. You probably already know that at least one of the answer choices is incorrect. Mark out answer choices that are clearly incorrect even if you can't completely figure out the correct answer. This will make guessing wisely easier.
- H. For gridded-response items, think and calculate carefully and then fill in the grid correctly.
- I. Review your multiple-choice answers and gridded-response answers when you are finished to make sure you have the **best** answer.
- J. Do your own work. Copying another student's answers is not right.
- K. Most tests are too long, and you will get tired. Keep at it. It may help to stretch your back and arms or look at the ceiling or out a window from time to time.
- L. Remain calm. Tests are important, but they aren't the end of the world. Do the best you can.

Successful Test Taking Strategies for Answering Multiple-Choice/Gridded-Response Items

1. Read each item carefully.
Try to get a “feel” for what the answer might be while you are reading the item.
2. Ask and answer, "What do I know?" "What am I being asked to do?"
3. For each type of item, think and calculate carefully.
4. For multiple-choice items, there will be 4 answer choices.
Look at each answer choice.
Mark out answer choices that are clearly incorrect.
If you really don't know the answer, try using each answer choice in the item.
“Plugging-in” each answer choice may help you determine the **best** answer.
5. Mark the **best** answer right in this book by filling in the circle (bubble) to the left of the answer you chose. Completely fill in only one bubble.
A correct answer is worth one point.
6. For gridded-response items, work the item and find an answer.
Write your answer in the answer boxes at the top of the grid.
Put the first digit in the left answer box, or the last digit in the right answer box.
Be sure to write a decimal point or a fraction bar or a negative sign in the answer box if it is part of the answer.
Fill in the matching bubbles under each box in which you wrote a number, a decimal point, a fraction bar, or a negative sign.
Completely fill in only one bubble below each answer box.
The correct answer will always fit in the grid.
A correct answer is worth one point.

10 Strategies for Successful Test Taking in Mathematics

Good math test takers:

1. Read the item carefully.
2. Ask, "What does the item want me to do?"
 - add, subtract, multiply, divide, estimate, measure?"
3. Ask and answer, - "What do I know?"
 - "What am I being asked to do?"
 - "What procedures do I use?"
4. Solve multiple-choice items by marking out all incorrect answer choices and then selecting the **best** answer.
5. Solve gridded-response items by thinking and calculating carefully.
6. Review multiple-choice answers and gridded-response answers to be sure they have the **best** answer.
7. If stuck, circle the item number or the entire item to return to it later for additional work.
8. Take quick stretch breaks when needed, then ask, "What am I getting ready to do next?"
9. Don't give up. Sometimes the easiest items are at the end of the test.
10. Smile and pat themselves on the back for finding the best answers.



General Information for the Student:

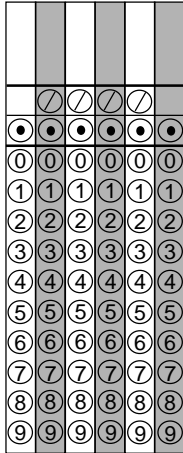
Here are some important things to remember as you use this book:

1. For multiple-choice items, choose the **best** answer by filling in the circle (bubble) to the left of the answer you chose.
2. For gridded-response items, think and calculate carefully. Then carefully fill in the grid.
3. Mark your answers right in this book.
4. If you do not know the answer to an item, go on to the next item. You can return to that item later.
5. **CONTINUE WORKING UNTIL YOU REACH A STOP SIGN. THEN STOP.**
6. If you finish the Day One session early, you may check your work **only** in this session. Do not look ahead to the next session.

- 4 The scale on a drawing of the floor plan of a middle school is 1 inch = 25 feet.

The length of a seventh grade classroom on the drawing is $2\frac{1}{2}$ inches.

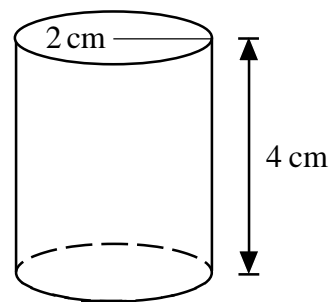
What is the actual length, **in feet**, of the seventh grade classroom?



- 17 A right-circular cylinder has a radius of 2 centimeters and a height of 4 centimeters. The radius and the height of the cylinder are increased 4 times.

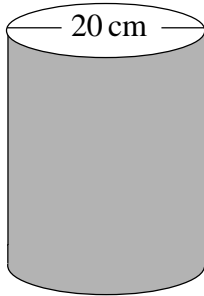
What happens to the volume of the cylinder? (use 3.14 for π)

- (A) The volume will be 4 times greater.
- (B) The volume will be 16 times greater.
- (C) The volume will be 32 times greater.
- (D) The volume will be 64 times greater.

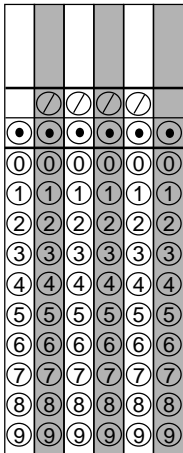


Use the information below to answer items 13 and 14.

The right-circular cylinder has a height of 30 cm.



- 14 What is the total surface area, in square centimeters, of the cylinder? (use 3.14 for π)



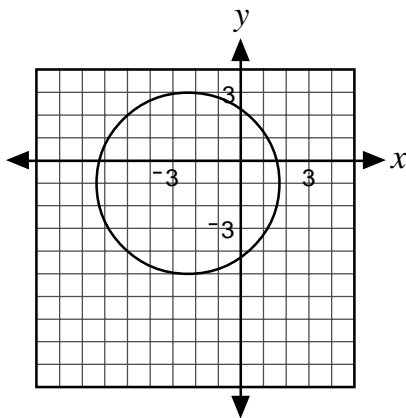
- 23 Thom has two numbers cubes. Each face of both cubes has a different number written on the face. The numbers on the faces of both cubes are from 1 to 6. If Thom rolls both number cubes at the same time and adds the two numbers that come up, which is the **most likely** outcome?

- (A) rolling a sum of 7
- (B) rolling a sum of 8
- (C) rolling a sum of 10
- (D) rolling a sum of 12

- 27 Mr. Ramirez is buying furniture on a payment plan. The furniture costs \$4,500. When Mr. Ramirez picked out the furniture, he paid a down payment of \$800. Since making the down payment, he has been paying monthly payments of \$139.98 each month. So far Mr. Ramirez has paid a total of \$2,339.78. For how many **months** has Mr. Ramirez being paying for the furniture?

	7	7	7	7	
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 30 Max drew the circle on the grid shown below.



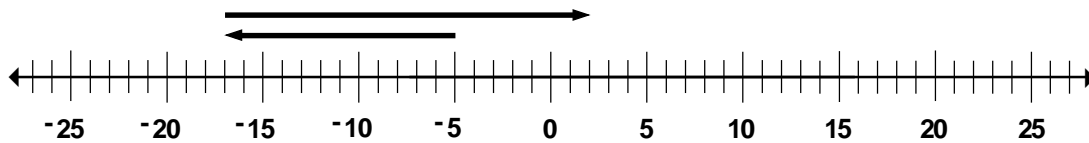
The circle passes through which of the following coordinates?

- (F) (-2, 4)
- (G) (-5, -4)
- (H) (-5, 4)
- (I) (-2, -6)

31 Solve for x : $-6x - 2 = 2x + 14$

-	/	/	/	/	/	/
•	•	•	•	•	•	•
0	0	0	0	0	0	0
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

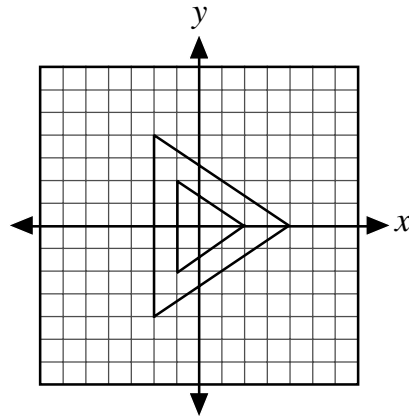
32 The number line shows a method for finding the value of an expression.



Which expression below is represented by the number line?

- (A) $-5 + 12 - 19$
- (B) $-5 - 12 + 19$
- (C) $-5 + 12 + 19$
- (D) $-5 - 12 - 19$

- 33** Jenny drew the small triangle on the grid below. Then she drew the larger triangle with a scale factor of two.



When Jenny drew the larger triangle, what type of transformation did she make?

- (F) a reflection
- (G) a translation
- (H) a dilation
- (I) a rotation

- 34** Which table represents an inverse variation between x and y ?

x	3	6	9	12
y	12	9	6	3

(A)

x	1	2	4	8
y	8	16	32	64

(C)

x	2	4	6	8
y	7	14	21	28

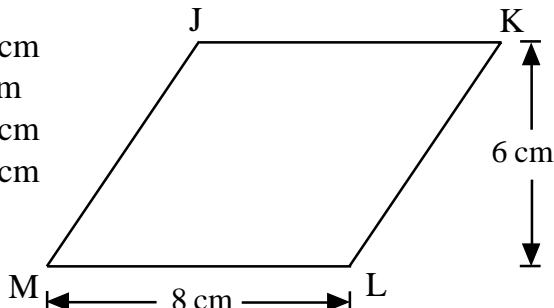
(B)

x	1	2	4	8
y	8	4	2	1

(D)

- 40 Sancho’s teacher drew rhombus JKLM with the height and base as shown below. Sancho drew another rhombus that is similar to rhombus JKLM. Which of the following could be the dimensions of the rhombus Sancho drew?

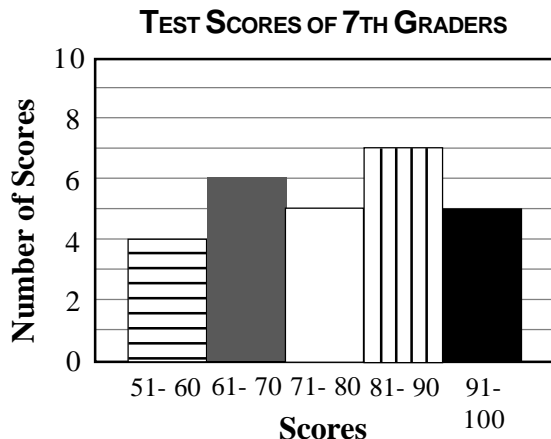
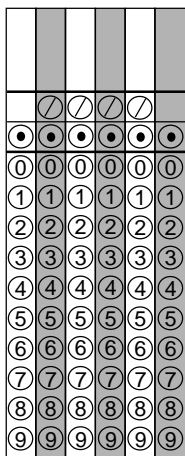
- (F) height = 9 cm; base = 12 cm
- (G) height = 4 cm; base = 6 cm
- (H) height = 18 cm; base = 32 cm
- (I) height = 14 cm; base = 16 cm



- 43 Lincoln drove his car at an average speed of 68 miles per hour on the highway. After Lincoln left the highway and drove on a state road, he drove his car at an average speed of 42 miles per hour. Which is closest to the percent of decrease in the average speed of Lincoln’s car?

- (F) 26%
- (G) 38%
- (H) 62%
- (I) 68%

- 44 The histogram shows the test scores of some 7th graders. How many test scores are in the 71 - 80 range?



- 49** Amaya has 2 orange marbles, 9 blue marbles, 5 green marbles, and 4 yellow marbles in a bucket. Amaya conducts an experiment in which she draws, without looking, a marble from the bucket, records the color, and returns the marble to the bucket. She repeats this process 75 times.

Which is closest to the number of times Amaya should expect to draw a blue marble?

- (F) 15
- (G) 19
- (H) 34
- (I) 41

- 63** Robin, who is in the 7th grade, wants to determine which foods served in the school cafeteria the 7th graders in her middle school like most. She plans to survey students about their cafeteria food preferences. Which approach for Robin’s survey would be most valid?

- (A) Survey every fifth student in half the 7th grade home rooms.
- (B) Survey all of Robin’s friends.
- (C) Survey every fifth student who likes math as their favorite subject.
- (D) Survey a random selection of 75 students from each of the middle school’s grade levels.

- 82** Which statement about the table is true?

x	3	6	9	12
y	12.6	25.2	37.8	50.4

- (F) the sum of x and y is always constant
- (G) x is always a constant multiple of y
- (H) y is always a constant multiple of x
- (I) the product of x and y is always constant

- 83** Which is equivalent to $9(-2 - 3x) + 4 = 81$?

- (A) $-18 - 27x + 36 = 81$
- (B) $-18 + 27x + 36 = 81$
- (C) $-14 + 27x = 81$
- (D) $-14 - 27x = 81$

Mathematics

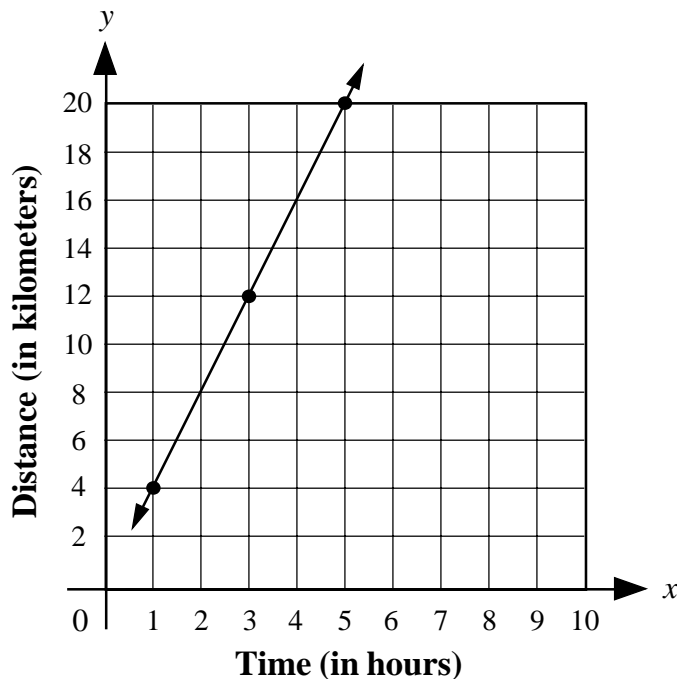
- 92 A Florida panther runs at an average speed of 54 miles per hour. Which is closest to this speed in feet per second?

(F) 39
(G) 79
(H) 158
(I) 200

- 93 Which of the following is equivalent to $7\frac{8}{55}$?

(A) $7.14\overline{5}$
(B) 7.145
(C) $7.14\overline{5}$
(D) $7.\overline{145}$

- 95 Jiman went hiking on some trails near his home. He hiked the same distance each hour. The graph below shows the rate at which he hiked.



Which of the following shows the rate at which Jiman hiked?

- (A) 2 kilometers per 1 hour
(B) 4 kilometers per 1 hour
(C) 1 kilometer per 4 hours
(D) 1 kilometer per 2 hours

Answer Key & Teacher's Guide

Successful Test Taking[®] **MATHEMATICS 7**

2011 Edition

LEADERSHIP RESOURCES[®]


8398 Cypress Hollow Dr., Sarasota, FL 34238

800.257.7157 Fax 941.924.6829

Successful Test Taking[®]

This *Successful Test Taking[®]* Mathematics 7 book is specifically designed to assist teachers and students as they incorporate the information and skills contained in the Sunshine State Standards into their learning environment. Each item has been aligned with the benchmarks. There is at least one item in the book for each assessable benchmark. As such, the book is an **essential teaching resource** for educators interested in preparing their students for the Florida Comprehensive Assessment Test (FCAT). Students will see the book as a helpful **learning tool** to master important mathematics skills.

Using "Successful Test Taking[®]"

1. After each student receives a Successful Test Taking[®] Mathematics 7 book, let them know they can write and mark their answers in the book.
2. Use pages 3-5 to discuss preparation and aids to test taking.
3. On page 6, review with your students the strategies for answering multiple-choice and gridded-response items on the Florida Comprehensive Assessment Test.
4. This book is divided into two sessions: Day One and Day Two. You may wish to spend more time and/or days using this book.
5. Have students turn to the 10 Strategies for Successful Test Taking on page 7 and discuss it with them. Then review the General Information for the Student on page 8.
6. Next, have students begin the math items for Day One testing on page 9. Students will continue working until they reach page 27 (item 50).
7. Day Two testing (page 28) will be carried out in the same fashion as Day One, with students working on items 51-100.
8. **Remind students to continue working on the math problems until they reach a stop sign  in their book, at which point students stop.**
9. There are 100 items and 100 possible points in the Mathematics 7 book.



Successful Test Taking[®]
MATHEMATICS 7

Answer Key

Multiple-Choice items are worth.....1 point each
Gridded-Response items are worth.....1 point each
The benchmark for each item is located above each correct answer.

Day One
Pages 9 - 27

1. A.3.4
B $-24 + 20x = 54$
2. A.1.1
H \$258.30
3. G.2.1
D 880 square inches
4. A.1.6 (grid)
62.5
5. P.7.2
G 0.25
6. G.4.1
C Shari will have to quadruple the width.
7. S.6.2
G 7
8. A.1.6
C 48 ounces
9. A.1.3
G 20 inches
10. A.3.3
C add 8 to each side of the equation, then multiply each side by $\frac{4}{3}$
11. A.5.1
I $5.\overline{51}$
12. G.4.2
D (1, 2) (4, 2) (3, -1)

What Educators Say About Our Products

"Thank you, thank you for creating an affordable, low-tech, user-friendly set of practice books. We have used the Successful Test Taking series in our district for ... years now and have seen a significant improvement in our overall assessment scores. Not only does this product give excellent and timely practice in age-appropriate test skills, but their use has reduced test anxiety for students and staff."

Becky Stone, Home/School Liaison, Mason County Central Schools

"The information provided from the Successful Test Taking is given in a user-friendly format. It is the first instrument we have seen that breaks down the individual skills that are needed for students to be successful on the assessment. We are very pleased with the STT evaluation. It gives the students an opportunity to duplicate the testing strategies required to be successful on the state assessment."

Gwen Tabb, Director of Human Resources, Waverly Community Schools

"We were not satisfied with our scores in 4th grade. Although we could see the 'target', we needed help in practicing to hit it and assessing how accurate we were. The Successful Test Taking provided the answers we were looking for! Practice in hitting the target was given, an assessment of performance was made, and improvements were put in place that allowed us to hit the target more accurately than we ever have in the history of our school! As a staff, we thank LEADERSHIP RESOURCES for giving our students the opportunity to reach their potential and experience success!"

Jon D. Hoover, former Superintendent, Littlefield Public Schools

"We have been using the Successful Test Taking in our school district for ... years and have been very pleased with the results. Our scores have increased steadily during this time. We have really appreciated the personal service that we have received from LEADERSHIP RESOURCES."

Mary Ruddy, former Principal, Imlay City Community Schools

"We found your book, *Informational Text for Classroom Use*, very useful in teaching our students an array of test taking and informational reading strategies. The activities and readings in this book are closely aligned with our state assessment used by our district, and has also fit well with our state test. We saw a great increase in student achievement in the area of informational reading among our students from using this material."

Kristine Jackson & Roslyn Wikoff, Teachers, Weld County Schools

"We found your Successful Test Taking books to be helpful in preparing students for our state assessment. The books contain test taking strategies, sample items similar to the actual test items, and a review at the end. We believe these books were key in helping children become familiar with the format of the test, and preparing them for lifelong test taking. We would strongly recommend these books to other classroom teachers."

Jennifer Rios & Kelly Seilbach, Weld County Schools

"I ordered your Successful Test Taking for Reading and Math. My colleagues and I were very impressed. We intend to order them again next year. Since we paid for them ourselves, we appreciated the low cost. Your materials are an excellent value for the money!"

Teacher, Taylor Public Schools

"We have used your books - they are very helpful! With these books and a lot of work, our 4th Grade Reading and Math scores SOARED!"

Mary Alice Boone, Teacher, AuTrain-Onata Public Schools

"My school district orders your books for us to use to prepare for our state assessment and to improve strategies. They are user-friendly!"

4th Grade Teacher, Marquette Area Public Schools