

A Quick-Study® Program

Book

4

TEST... READY®

– PLUS –
MATHEMATICS

- **REVIEWS**
Key Math Concepts
- **PROVIDES**
Problem-Solving Practice
- **STRENGTHENS**
Math-Reasoning Skills
- **DEVELOPS**
Test-Taking Skills
- **IMPROVES**
Math Assessment Scores

Name: _____

 CURRICULUM ASSOCIATES®, Inc.

For the Student

TEST READY® PLUS Mathematics is a problem-solving review program that provides practice in math and test-taking skills. The program can be completed in fourteen days. Your teacher will provide you with directions for doing the lessons and recording the answers. Your teacher will also tell you when to begin work on each lesson part and when to stop.

It is important that you read and follow all directions. When the directions tell you to STOP, go no further. Wait for your teacher to tell you what to do. While you work on the **TEST READY PLUS Mathematics** lessons, use the **Testing Tips** below. Read these helpful tips carefully. They can make you a better test taker. After the optional Pretest, each lesson, and the Practice Test, record your results on the **Student Performance Chart** below. Your teacher will show you how to determine percentages if you need help.

Testing Tips

- Read each problem carefully.
- Note all the facts in a problem before you try to solve it.
- Determine the number of steps needed to solve the problem before you begin.
- Estimate the answer to see if you can cross out any of the multiple choices.

This **TEST READY PLUS Mathematics** book was prepared for students by Brian E. Enright and Diane Spencer.

Student Performance Chart		Number Correct	Percent Correct
Lesson 1	<input type="text"/>	10	%
Lesson 2	<input type="text"/>	10	%
Lesson 3	<input type="text"/>	10	%
Lesson 4	<input type="text"/>	10	%
Lesson 5	<input type="text"/>	10	%
Lesson 6	<input type="text"/>	10	%
Lesson 7	<input type="text"/>	10	%
Lesson 8	<input type="text"/>	10	%
Lesson 9	<input type="text"/>	10	%
Lesson 10	<input type="text"/>	10	%
Average (Lessons 1–10)			%
Practice Test	<input type="text"/>	50	%
Pretest	<input type="text"/>	50	%

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15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

Lesson 8



Part 1 Data and Probability

The pictograph shows the number of soda cans collected by a school group in seven days. Study the graph. Then answer questions 1 through 4.



- What is the difference between the number of cans collected on Thursday and the number of cans collected on Friday?**

Ⓐ 5 cans
 Ⓑ 45 cans
 Ⓒ 25 cans
 Ⓓ 20 cans
- How many cans did the school group collect on Wednesday?**

Ⓐ 35
 Ⓑ 40
 Ⓒ 50
 Ⓓ 15
- The school group received 5 cents for each can they collected. How much money did the group earn in all?**

Ⓐ \$6.80
 Ⓑ \$3.60
 Ⓒ \$10.25
 Ⓓ \$12.50

- If the school group had wanted to earn \$15.00 for the cans, how many more cans should they have collected?**

- Ⓐ 110
 Ⓑ 95
 Ⓒ 475
 Ⓓ 30

- Marla is making a pillow and sewing lace around the outside edge of it. The pillow is 8 inches wide and 10 inches long. The lace costs \$3.00 a yard. The fabric to make the pillow costs \$5.00 a yard. What information is not needed to find how much it will cost to buy lace for the pillow?**

- Ⓐ The lace costs \$3.00 a yard.
 Ⓑ The pillow is 8 inches wide.
 Ⓒ The pillow is 10 inches long.
 Ⓓ The fabric costs \$5.00 a yard.

- Look at the chart below. It shows the color and number of pencils in Toni's pencil bag. If Toni, without looking, selects one pencil from the bag, what are the chances that she will select a red pencil?**

Toni's Pencil Bag

Color	Number
red	
blue	
green	

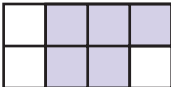
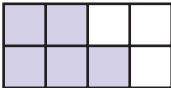
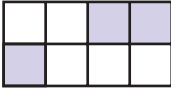

- Ⓐ 1 out of 4
 Ⓑ 1 out of 3
 Ⓒ 1 out of 2
 Ⓓ 2 out of 3

Part 2 Mixed Practice

7. The length of a rectangle is 3 feet. What additional information about the rectangle does Sam need to know to determine the area?

- (A) the measure of the diameter
- (B) the measure of the radius
- (C) the measure of the width
- (D) the measure of the angles

8. What rectangle is *not* $\frac{5}{8}$ shaded?

- (A) 
- (B) 
- (C) 
- (D) 

9. Alma put her pictures into an album. She put 6 on each page and filled 4 pages. What number sentence shows a way to determine how many pictures Alma put into the album?

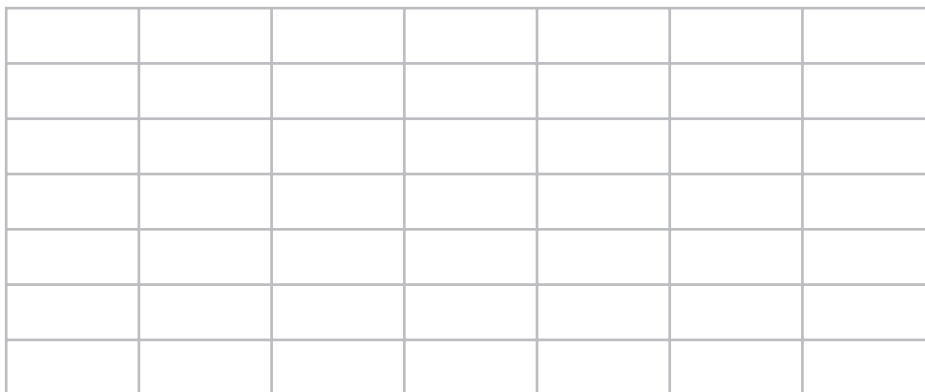
- (A) $6 + 4 = \square$
- (B) $4 + 4 + 4 = \square$
- (C) $4 \times 6 = \square$
- (D) $6 \div 4 = \square$

10. Tara has 20 stuffed animals to move in boxes to her new house. She will put 5 stuffed animals into each box. Which of these tells how to figure out how many boxes Tara will need?

- (A) subtract 5 from 20
- (B) divide 20 by 5
- (C) multiply 20 by 5
- (D) add 20 and 5

Part 3 Math Reasoning

11. For 5 consecutive days in January, Ms. Clinton's class graphed the high temperature for the day. Create a line graph that represents the high temperature for each of the 5 days. Then write one question about the graph.



Question: _____

TEACHER GUIDE

Book

4

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For the Teacher

What is **TEST READY® PLUS Mathematics**?

TEST READY PLUS Mathematics is a review program that provides practice in math test-taking skills and problem-solving strategies. This ten-level program is designed for students in grades K, 1 through 8, and Advanced. Each **TEST READY PLUS Mathematics** level is a 32-page book of ten lessons, a Practice Test, an Answer Form, and a Student Performance Chart (in Books 3 through Advanced). The optional Pretest appears in the teacher guide. Books 1 and 2 require direct teacher instruction. The scripted text for administering the lessons, the Practice Test, and the optional Pretest is included in the teacher guide.

- Lessons 1 through 10 are two-page lessons. Each lesson provides practice with eleven problems related to basic math understanding and the higher-order math thinking skills. **TEST READY PLUS Mathematics, Book 4**, presents a total of 218 math problems (including the optional Pretest).

The first page of each lesson contains six problems that focus on the concepts and application of one of six major strands of mathematics: data and probability, number sense, measurement, geometry, operations, and patterns and algebra.

The second page mixes four problems from the five other strands. The page concludes with a math-reasoning problem that represents the strand featured on the first page. Math-reasoning problems can be solved using two or more strategies and often have more than one answer.

Each math-reasoning item is presented in a problem-solving setting, is relevant to daily living, and is designed to challenge students to think and write critically.

- The reproducible optional Pretest appears in the teacher guide. It provides information about each student's math ability before beginning the program.

- The Practice Test provides practice with the concepts and strategies reviewed in each lesson. The Practice Test allows students the opportunity to simulate the test-taking experience.
- The Answer Form, on page 30 of the student book, provides students with the opportunity to record answers on a form similar to the ones used with most standardized assessments.
- The Student Performance Chart, on the inside front cover of the student book, provides students with a chart for recording their progress after they complete each of the ten lessons, the optional Pretest, and the Practice Test. The scores for the math-reasoning problems are not recorded on the chart.
- **TEST READY PLUS Mathematics, Book 4**, reviews math strategies introduced and developed in grade 4.

How does **TEST READY® PLUS Mathematics, Book 4**, correlate to major standardized and proficiency assessments?

Major standardized assessments vary in content, format, and level of difficulty. **TEST READY PLUS Mathematics** provides practice with a variety of widely used assessment formats and a broad range of grade-appropriate mathematics strategies that major standardized and proficiency assessments evaluate.

How does **TEST READY® PLUS Mathematics, Book 4**, correlate to the standard mathematics curriculum?

Problems included in each lesson of **TEST READY PLUS Mathematics** reflect the major content and skill areas that appear in the grade 4 mathematics curriculum. Mathematics items included in each lesson are based on information gathered from a review of current math programs, standardized tests, state assessments, and standards promoted by the National Council of Teachers of Mathematics.

LESSON 6

Problem 11

Shapes will vary. One example of a shape with an area of 10 square units could have dimensions of 5×2 square units and a perimeter of 14 units.

LESSON 7

Problem 11

Answers will vary. Possible explanation for the attendance over the 3-day period: Friday: any number between 1,050 and 1,149; Saturday and Sunday: any number between 1,150 and 1,249.

LESSON 8

Problem 11

Graphs will vary. Accept any line graph that shows reasonable data for 5 January days. One question might be: "How many degrees range between the day with the highest reading and the day with the lowest reading?"

LESSON 9

Problem 11

Drawings will vary. Possible definition of *parallel*: "lines and planes that are the same distance apart at every point."

LESSON 10

Problem 11

Answers will vary. Examples that could be used to estimate a meter: 1) the width of a door; 2) the height of a table; 3) the length of a yardstick; 4) the width of a bowling alley. Possible explanation: "A meter is the basic unit of length in the metric system; it has an equivalent customary length of about 39 inches."

Scope and Sequence for Book 4

Question Types	Lessons and Questions
Number Sense	1 (1–6); 2 (8); 3 (7, 9); 5 (9); 7 (1–6, 11); 8 (8); 10 (9); PT and OP (7, 13, 16, 25, 26, 31, 37, 38, 43, 49, 50, 53)
Operations	1 (9, 10); 2 (1–6); 3 (10); 4 (7, 9, 10); 7 (9); 8 (9, 10); 10 (7); PT and OP (1, 3, 9, 12, 19, 21, 40, 46, 51)
Patterns and Algebra	3 (1–6, 11); 7 (10); 9 (10); 10 (8); PT and OP (22, 27, 39)
Data and Probability	
<ul style="list-style-type: none"> • Graphs, Charts, and Tables 	1 (9); 2 (9, 10); 4 (1–4, 11); 5 (7, 8); 7 (7, 8); 8 (1–4, 11); 9 (7, 8); PT and OP (4–6, 15, 23, 24, 33–36, 52)
<ul style="list-style-type: none"> • Averages 	1 (8); PT and OP (42)
<ul style="list-style-type: none"> • Probability 	1 (11); 8 (6); PT and OP (48)
<ul style="list-style-type: none"> • Data Interpretation 	8 (5); PT and OP (18)
Geometry	5 (1–6, 11); 9 (1–6, 11); 10 (10); PT and OP (10, 11, 17, 23, 28, 29)
Measurement	
<ul style="list-style-type: none"> • Standard and Metric 	2 (7); 6 (3, 5, 6, 11); 8 (7); 9 (9); 10 (2, 4–6, 11); PT and OP (20, 32, 41, 44, 45, 47)
<ul style="list-style-type: none"> • Time and Money 	3 (8); 4 (8); 5 (10); 6 (1, 2, 4); 10 (1, 3); PT and OP (2, 8, 14, 30, 54)

NOTE: The boldface number in a set indicates the lesson. The numbers in parentheses indicate the questions. **PT** = Practice Test **OP** = Optional Pretest