

# Contents

- Introduction . . . . . **3**
- Suggestions for Use . . . . . **8**
- Additional Materials for Review . . . . . **9**
- Scoring Rubric for Constructed-Response Items . . . . . **10**
- Scoring Rubric for Extended-Response Items . . . . . **10**
- Answer Key
  - Unit 1 . . . . . **11**
  - Unit 2 . . . . . **14**
  - Unit 3 . . . . . **16**
  - Unit 4 . . . . . **18**
  - Unit 5 . . . . . **21**
  - Unit 6 . . . . . **23**
  - Unit 7 . . . . . **24**
  - Unit 8 . . . . . **26**
  - Unit 9 . . . . . **27**
  - Practice Test . . . . . **30**
- Reproducible Answer Sheets for Practice Test . . . . . **32**
- Reproducible Answer Sheet for Multiple-Choice Items with  
Answer Key for Practice Test . . . . . **36**
- Common Core State Standards for Mathematics, Grade 4 . . . . . **37**
- Reproducible Skill Analysis Chart for Practice Test . . . . . **41**
- Reproducible Cut-Out Tools . . . . . **42**

## Acknowledgments

*Common Core State Standards* © Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

ISBN 978-0-8454-K6760-2

Copyright © 2011 The Continental Press, Inc.

Excepting the designated reproducible blackline masters, no part of this publication may be reproduced in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. All rights reserved. Printed in the United States of America.



# Continental Press

# Answer Key

## Unit 1 Number Sense

### Lesson 1 Whole-Number Place Value

pp. 8–11

1. D [4.NBT.1]
2. C [4.NBT.2]
3. D [4.NBT.1]
4. A [4.NBT.1]
5. C [4.NBT.2]
6. B [4.NBT.1]
7. D [4.NBT.2]
8. B [4.NBT.1]
9. Constructed response [4.NBT.1]  
Ten thousands, 80,000; tens, 80
10. Constructed response [4.NBT.2]  
No. *Explanations may vary but should say something like the following:* The first 8 is three places to the right of the second 8. Since each place is 10 times greater than the place to the right, it is  $10 \times 10 \times 10 = 1,000$  times greater.
11. Constructed response [4.NBT.2]  
 $(7 \times 100,000) + (2 \times 1,000) + (5 \times 100)$
12. Constructed response [4.NBT.2]  
Twelve thousand, one hundred three
13. Constructed response [4.NBT.2]  
The 7 is in the ten thousands place. It should be written as  $(7 \times 10,000)$ . The 1 is in the thousands place. It should be written as  $(1 \times 1,000)$ .
14. Extended response [4.NBT.1, 2]  
Part A: *Word form:* nine million, forty-four thousand, ten; *Expanded form:*  
 $(9 \times 1,000,000) + (4 \times 10,000) + (4 \times 1,000) + (1 \times 10)$   
Part B: They are both right. *Explanations may vary but should say something like the following:* The 4 on the left has a value of  $4 \times 10,000$  and the 4 on the right has a value of  $4 \times 1,000$ . The value 10,000 is 10 times 1,000. So 40,000 is 10 times greater than 4,000. The value of 10,000 can be divided by 10 to get 1,000, so 1,000 is  $\frac{1}{10}$  of 10,000.

### Lesson 2 Comparing Whole Numbers

pp. 12–15

1. D [4.NBT.2]
2. C [4.NBT.2]

3. C [4.NBT.2]
4. B [4.NBT.2]
5. C [4.NBT.2]
6. A [4.NBT.2]
7. D [4.NBT.2]
8. Constructed response [4.NBT.2]  
Bristlecone pine. *Explanations may vary but should say something like the following:* The number has a 4 in the thousands place, which is greater than 3. It has an 8 in the hundreds place, which is greater than 0 or 2.
9. Constructed response [4.NBT.2]  
Ten thousands, thousands, and then hundreds
10. Constructed response [4.NBT.2]  
 $459,976 > 458,967 > 458,796$  or  $458,796 < 458,967 < 459,976$
11. Constructed response [4.NBT.2]  
Leo put the largest number in the middle of the order. The digits of the numbers are the same until the hundreds. The first number has 0 hundreds, the second has 6 hundreds, and the third has 4 hundreds. The number 6 is greater than 4. The correct order is 190,064, 190,460, 190,640.
12. Extended response [4.NBT.2]  
Part A: Right whale  
Part B: Humpback, gray, bowhead, fin, right, blue. *Explanations may vary but should say something like the following:* The humpback and the gray whale weights have only five digits, so those two are the smallest. The ten thousands digits are 6 and 7. Since 6 is less than 7, the humpback is the smallest and the gray is the next smallest. In the rest, the hundred thousands digits are 1 or 2. Since 1 is less than 2, the blue whale is the largest. I compared the ten thousands digits for the fin, bowhead, and right whales. Since  $2 < 3 < 4$ , the bowhead is third, the fin is fourth, and the right is fifth.

### Lesson 3 Rounding Whole Numbers

pp. 16–19

1. B [4.NBT.3]
2. C [4.NBT.3]
3. C [4.NBT.3]
4. B [4.NBT.3]
5. B [4.NBT.3]
6. C [4.NBT.3]

# Common Core State Standards for Mathematics, Grade 4

## Operations and Algebraic Thinking

4.OA

### Use the four operations with whole numbers to solve problems.

1. Interpret a multiplication equation as a comparison, e.g., interpret  $35 = 5 \times 7$  as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparison as multiplication equations.
2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.
3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

### Gain familiarity with factors and multiples.

4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

### Generate and analyze patterns.

5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. *For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.*

## Number and Operations in Base Ten

4.NBT

### Generalize place value understanding for multi-digit whole numbers.

1. Recognize that in a multi-digit number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that  $700 \div 70 = 10$  by applying concepts of place value and division.*
2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons.
3. Use place value understandings to round multi-digit whole numbers to any place.

