

Sample Pages from



Created *by* Teachers *for* Teachers and Students

Thanks for checking us out. Please call us at **800-858-7339** with questions or feedback or to order this product. You can also order this product online at **[www.tcmpub.com](http://www.tcmpub.com)**.

For correlations to state standards, please visit  
**[www.tcmpub.com/administrators/correlations](http://www.tcmpub.com/administrators/correlations)**

## **Focused Mathematics Intervention— Nivel 5 (Level 5)**

**This sample includes the following:**

**Teacher's Guide Cover** (1 page)

**Teacher's Guide Table of Contents** (1 page)


**How to Use This Product** (4 pages)

**Lesson Plan** (17 pages)

To Create a World <sup>in</sup> which  
**Children** love to Learn!

800-858-7339 • [www.tcmpub.com](http://www.tcmpub.com)

Level 5

A target graphic with concentric circles in red, yellow, and blue, centered behind the letter 'F' in the word 'Focused'.

# Focused Mathematics Intervention

**Teacher's Guide**

**Teacher Created Materials**  
PUBLISHING

# Table of Contents

## Welcome

Program Welcome . . . . .	4
---------------------------	---

## Research

Research on Mathematics Intervention . . . . .	6
The Need for Intervention . . . . .	7
Response to Intervention in Mathematics . . . . .	8
Components of Effective Mathematics Interventions . . . . .	10
High-Yield Strategies for Increasing Student Achievement . . . . .	12
Using Technology to Improve Mathematical Learning . . . . .	13
Using Games to Motivate Struggling Math Learners . . . . .	14
Assessment . . . . .	15

## Best Practices

Components of Effective Mathematics Intervention Programs . . . . .	17
Differentiation . . . . .	19
Differentiating by Specific Needs . . . . .	19
Developing Academic Vocabulary . . . . .	21
Academic Vocabulary . . . . .	21
Developing Math Skills Using Concrete Models . . . . .	22
Developing Mathematical Problem-Solving Skills . . . . .	24
Why We Teach Problem Solving . . . . .	24
Making Connections . . . . .	24
A Problem-Solving Framework . . . . .	25
Math in the Real World . . . . .	28
Developing Math Fluency Skills . . . . .	29

## How to Use This Product

Kit Components . . . . .	31
Getting Started . . . . .	32
Teaching a Lesson . . . . .	33
Using the Math Fluency Games . . . . .	35
How to Organize and Manage Games . . . . .	35
Playing the Math Fluency Game Sets . . . . .	36
Playing the Digital Math Fluency Games . . . . .	39
Using the Technology Options . . . . .	40

## Planning for Intervention

Pacing Plans . . . . .	41
Correlations . . . . .	45
Introduction to Correlations . . . . .	45
Standards Correlations . . . . .	46
Series Scope and Sequence . . . . .	49

## Lessons

Lesson 1: Using Parentheses, Brackets, and Braces . . . . .	61
Lesson 2: Working with Expressions . . . . .	69

Lesson 3: Understanding Place Value Relationships . . . . .	77
Lesson 4: Multiplying and Dividing by Powers of 10 . . . . .	85
Lesson 5: Comparing Decimals to the Thousandths . . . . .	93
Lesson 6: Rounding Decimals . . . . .	101
Lesson 7: Multiplying Using the Standard Algorithm . . . . .	109
Lesson 8: Dividing Multi-Digit Numbers . . . . .	117
Lesson 9: Adding and Subtracting Decimals . . . . .	125
Lesson 10: Multiplying Decimals . . . . .	133
Lesson 11: Dividing Decimals . . . . .	141
Lesson 12: Solving Decimal Word Problems . . . . .	149
Lesson 13: Adding Fractions (Unlike Denominators) . . . . .	157
Lesson 14: Subtracting Fractions (Unlike Denominators) . . . . .	165
Lesson 15: Adding and Subtracting Fractions (Unlike Denominators) . . . . .	173
Lesson 16: Adding Mixed Numbers . . . . .	181
Lesson 17: Subtracting Mixed Numbers . . . . .	189
Lesson 18: Solving Word Problems by Adding/Subtracting Fractions . . . . .	197
Lesson 19: Interpreting Fractions as Division . . . . .	205
Lesson 20: Multiplying Fractions . . . . .	213
Lesson 21: Multiplying Mixed Numbers Using Area Models . . . . .	221
Lesson 22: Solving Word Problems by Multiplying Fractions . . . . .	229
Lesson 23: Dividing Fractions, Part I . . . . .	237
Lesson 24: Dividing Fractions, Part II . . . . .	245
Lesson 25: Solving Word Problems by Dividing Fractions . . . . .	253
Lesson 26: Converting Measurement Units . . . . .	261
Lesson 27: Finding Volume . . . . .	269
Lesson 28: Finding the Volume of Solid Figures Using a Formula . . . . .	277
Lesson 29: Locating and Plotting on a Coordinate Plane . . . . .	285
Lesson 30: Problem Solving with Coordinate Planes . . . . .	293

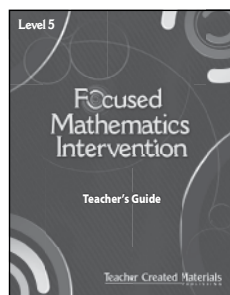
## Appendices

Appendix A: References Cited . . . . .	301
Appendix B: Teacher Glossary . . . . .	304
Appendix C: Digital Resources Charts . . . . .	308

# Kit Components

## Teacher's Guide

30 easy-to-use, standards-based lesson plans



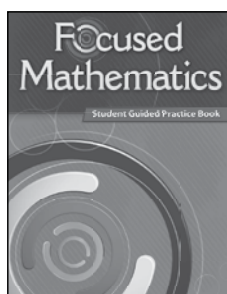
## 3 Digital Math Fluency Games

Focus on mathematical skills and strategies, and are on the Digital Resources USB Device



## Student Guided Practice Book

Full-color student activities

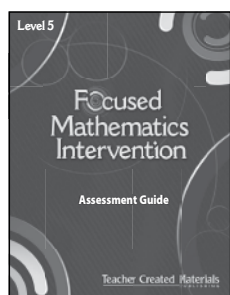


## Digital Resources

- PDFs of all student materials, game sets, activity sheets, assessments, etc.
- PDFs of teacher resources
- Digital Math Fluency Games
- Electronic versions of the Pretest, Posttest, Performance Tasks, and reporting tools

## Assessment Guide

Includes a pretest, posttest, performance tasks with assessments, and the answer key for the *Student Guided Practice Book*



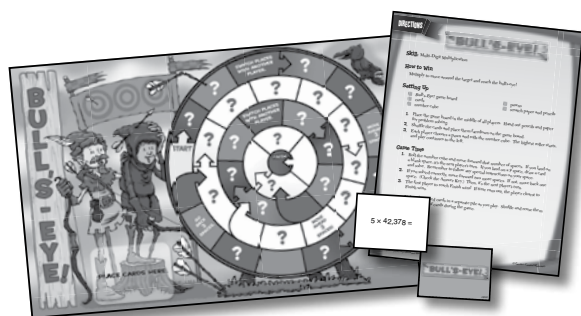
## Refocus Mini Lesson

Provide as PowerPoint® and PDF files



## 3 Math Fluency Game Sets

Include a game board, directions, an answer key, and game pieces



# Getting Started

1. Prior to instruction, administer the Pretest. This assessment covers all the mathematics skills and objectives for this level of the program. It can be used to determine which concepts have already been mastered by each individual student, as well as which lesson's concepts still need to be taught.

**Note:** Use the Pretest Item Analysis (pretestanalysis.doc; pretestanalysis.pdf; pretestanalysis.xls) to help monitor which skills are the most difficult for students and need to be focused on.

2. Determine the most appropriate pacing plan for students. Use or modify the pacing plans located on pages 41–44 to best meet the needs of your students.

**Pacing Plans**

When planning the pacing of a curriculum program, analyze student data to determine mastery on each lesson. Once pacing data is collected and analyzed, use the lesson number and the results of the Pretest to determine the pacing plan for each student. The Pretest is designed to determine which concepts students have already mastered and which concepts need to be taught. Teachers can use this information to pace the work of the student, and which lessons to skip. Some other ways to change the pace of the curriculum include: skip-lesson teaching.

**When to Revisit the Curriculum:**

- Create additional examples and use more slowly to assess mastery. If this is the case, allow for time for the practice and application of these skills and return to the lesson.
- Skip these lessons or concepts for which students have demonstrated mastery on the Pretest.
- Reduce the number of activities that students complete in the Student Guide.

**When to Reinforce the Curriculum:**

• If the concept in a particular lesson is very challenging to the student, allow more time for each component of the lesson including, goal practice, independent practice, and application practice and additional.

**The following pacing plan shows three options for using this complete kit. Teachers should create their own pacing plan for their students.**

Lesson	Developmental Goal	Prerequisite	Material	Note
Lesson 1	Factor 2-Digit Numbers	None	2-Digit Numbers	
Lesson 2	Prime Factorization	None	2-Digit Numbers	
Lesson 3	Least Common Multiple	None	2-Digit Numbers	

**Pacing Plans**

**Option 1: Sample Six-Week Pacing Plan**  
2 lessons/5 days/week

This pacing plan shows how the product can be used in a six-week intervention program.

Week	Day 1	Day 2	Day 3	Day 4	Day 5
1	Lesson 1: Factor 2-Digit Numbers (pages 101–105)	Lesson 2: Prime Factorization (pages 106–110)	Lesson 3: Least Common Multiple (pages 111–115)	Lesson 4: Fraction Multiplication (pages 116–120)	Lesson 5: Fraction Addition (pages 121–125)
2	Lesson 6: Fraction Subtraction (pages 126–130)	Lesson 7: Mixed Numbers (pages 131–135)	Lesson 8: Adding and Subtracting Mixed Numbers (pages 136–140)	Lesson 9: Multiplying Fractions (pages 141–145)	Lesson 10: Dividing Fractions (pages 146–150)
3	Lesson 11: Multiplying Whole Numbers (pages 151–155)	Lesson 12: Dividing Whole Numbers (pages 156–160)	Lesson 13: Multiplying and Dividing Mixed Numbers (pages 161–165)	Lesson 14: Word Problems (pages 166–170)	Lesson 15: Review (pages 171–175)
4	Lesson 16: Review (pages 176–180)	Lesson 17: Review (pages 181–185)	Lesson 18: Review (pages 186–190)	Lesson 19: Review (pages 191–195)	Lesson 20: Review (pages 196–200)

**Pacing Plans**

**Option 2: Sample Four-Week Pacing Plan**  
2 lessons/5 days/week

This pacing plan includes 20 lessons to be taught over a four-week intervention program. Teachers can adjust the pacing plan to best meet the needs of their students.

Week	Day 1	Day 2	Day 3	Day 4	Day 5
1	Lesson 1: Factor 2-Digit Numbers (pages 101–105)	Lesson 2: Prime Factorization (pages 106–110)	Lesson 3: Least Common Multiple (pages 111–115)	Lesson 4: Fraction Multiplication (pages 116–120)	Lesson 5: Fraction Addition (pages 121–125)
2	Lesson 6: Fraction Subtraction (pages 126–130)	Lesson 7: Mixed Numbers (pages 131–135)	Lesson 8: Adding and Subtracting Mixed Numbers (pages 136–140)	Lesson 9: Multiplying Fractions (pages 141–145)	Lesson 10: Dividing Fractions (pages 146–150)
3	Lesson 11: Multiplying Whole Numbers (pages 151–155)	Lesson 12: Dividing Whole Numbers (pages 156–160)	Lesson 13: Multiplying and Dividing Mixed Numbers (pages 161–165)	Lesson 14: Word Problems (pages 166–170)	Lesson 15: Review (pages 171–175)
4	Lesson 16: Review (pages 176–180)	Lesson 17: Review (pages 181–185)	Lesson 18: Review (pages 186–190)	Lesson 19: Review (pages 191–195)	Lesson 20: Review (pages 196–200)

**Pacing Plans**

**Option 3: Sample 20-Week Pacing Plan**  
2 lessons/5 days/week

This pacing plan shows how the program can be used in a six-month, after-school program or full-year program that covers the year from week 1 to week 20. Each week has five lessons in length, and 4 lessons completed in each day. Some lessons are marked by the 20-week program. Teachers can adjust the pacing plan to best meet the needs of their students.

Week	Day 1	Day 2
1	Lesson 1: Factor 2-Digit Numbers (pages 101–105)	Lesson 2: Prime Factorization (pages 106–110)
2	Lesson 3: Least Common Multiple (pages 111–115)	Lesson 4: Fraction Multiplication (pages 116–120)
3	Lesson 5: Fraction Addition (pages 121–125)	Lesson 6: Fraction Subtraction (pages 126–130)
4	Lesson 7: Mixed Numbers (pages 131–135)	Lesson 8: Adding and Subtracting Mixed Numbers (pages 136–140)
5	Lesson 9: Multiplying Fractions (pages 141–145)	Lesson 10: Dividing Fractions (pages 146–150)
6	Lesson 11: Multiplying Whole Numbers (pages 151–155)	Lesson 12: Dividing Whole Numbers (pages 156–160)
7	Lesson 13: Multiplying and Dividing Mixed Numbers (pages 161–165)	Lesson 14: Word Problems (pages 166–170)
8	Lesson 15: Review (pages 171–175)	Lesson 16: Review (pages 176–180)
9	Lesson 17: Review (pages 181–185)	Lesson 18: Review (pages 186–190)
10	Lesson 19: Review (pages 191–195)	Lesson 20: Review (pages 196–200)

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Pretest**

1. Add the following expressions:  
 $(18 + 16) + (14 + 21) + 45$   
 Ⓐ 48  
 Ⓑ 106  
 Ⓒ 72  
 Ⓓ 108
2. Subtract the following expression:  
 $44 - (30 - 23)$ . What is the value of the expression?  
 Ⓐ 12  
 Ⓑ 9  
 Ⓒ 14  
 Ⓓ 4
3. What number is  $2 \frac{1}{2}$  of 10?  
 Ⓐ 10  
 Ⓑ 15  
 Ⓒ 40  
 Ⓓ 100
4. What is 7 + 39?  
 Ⓐ 100  
 Ⓑ 39  
 Ⓒ 1000  
 Ⓓ 10000

## Pretest

**Pretest Item Analysis**

Directions: Copy responses to a spreadsheet and use the data to analyze performance. Add up the totals. You can then sort by column to see which students did well on which questions. Add up the number of questions missed in the spreadsheet.

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	% Correct	
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							
Total																							
% Correct																							

## Pretest Item Analysis

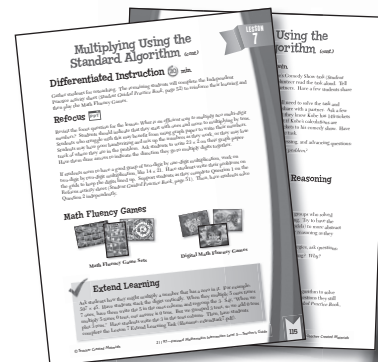
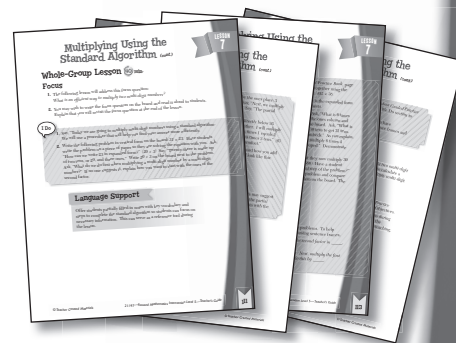
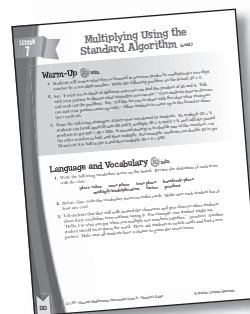
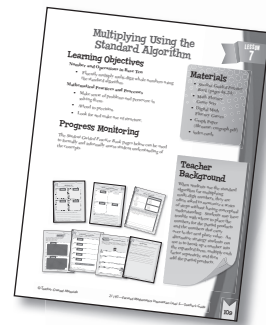


# Teaching a Lesson

## Teacher's Guide

Each 8-page lesson is organized in a consistent format for ease of use. Teachers may choose to complete some or all of the lesson activities to best meet the needs of their students. Lesson materials can be utilized flexibly in a variety of settings. For example, modeling with a small group, using printed materials with a document camera, or using PDF materials on a digital platform, such as an interactive whiteboard. Each lesson includes:

- an overview page with key information for planning
- key mathematics content standards covered
- key mathematical practices and processes addressed
- an overview providing teacher background or student misconceptions
- a Warm-Up activity to build students' recall of important mathematical concepts
- a whole-class Language and Vocabulary activity
- time markers to indicate the approximate time for instruction
- a whole-class section focusing on the key concept/skill being taught
- use of the gradual release of responsibility model in the Whole-Group lesson section
- differentiation strategies to support and extend learning with the Refocus lesson and Extend Learning activity
- math fluency games that motivate students to develop and reinforce mastery of basic skills
- a Math in the Real World concept task activity



# Teaching a Lesson (cont.)

## Student Guided Practice Book

Each lesson in the *Teacher's Guide* has seven corresponding student pages in the *Student Guided Practice Book*:

- a We Do activity to support the gradual release of responsibility model
- a You Do activity to facilitate independent practice
- a Quick Check to easily monitor students' progress
- a Refocus activity for students who need more instruction
- an Independent Practice page to reinforce mathematical content taught in the lesson
- a Math in the Real World concept task for students to apply the math concept in a real-life scenario
- a Reflection page for students to share their mathematical understanding



# Rounding Decimals

## Learning Objectives

### Number and Operations in Base Ten

- Use place value understanding to round decimals to any place.

### Mathematical Practices and Processes

- Model with mathematics.
- Attend to precision.
- Look for and make use of structure.

## Progress Monitoring

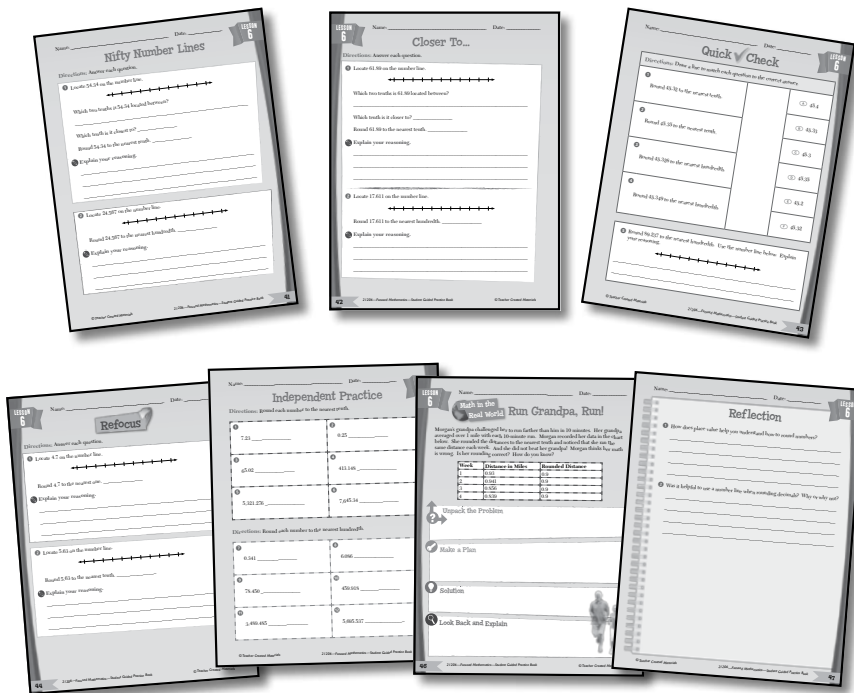
The *Student Guided Practice Book* pages below can be used to formally and informally assess student understanding of the concepts.

## Materials

- *Student Guided Practice Book* (pages 41–47)
- Math Fluency Game Sets
- Digital Math Fluency Games
- index cards
- chart paper
- markers
- unlined paper

## Student Misconceptions

Students may misapply the rule for “rounding up” by rounding the designated place value up but leaving the remaining digits as they are. For example, when rounding the number 13,567 to the nearest thousand, students may write 14,567 instead of 14,000. To be successful with rounding decimal numbers, students need a strong understanding of place value. A number line provides an effective visual model for students to understand place value and rounding.

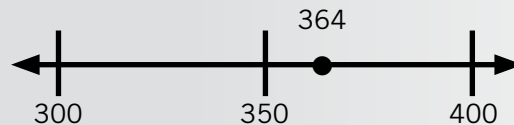




# Rounding Decimals (cont.)

## Warm-Up (10) min.

1. Write *tens*, *hundreds*, and *thousands* on index cards. Shuffle the cards and place them facedown on the table. Write the following on the board: *Round the number to the nearest \_\_\_\_\_*. Also, write a three-digit number (such as 364), and then move on to a four-digit number (such as 5,689) on the board.
2. To remind students how to round numbers to a designated place value, demonstrate using a number line. For example, when rounding 364 to the nearest hundred, students should know that they can either round 364 down to 300 or up to 400. Since 364 is greater than 350, the number is rounded up to 400. The number line should look like this:



3. Have a student volunteer select the top card and complete the sentence on the board with the word on the card. Have the class round the number on the board to the specified place. Ask students to write the rounded number on a sheet of paper. Have students hold up their papers. Scan the answers. Write a new three- or four-digit number on the board and continue play.

## Language and Vocabulary (10) min.

1. Write the following vocabulary terms on the board. Review the definition of each term with the class.

**tenths    hundredths    thousandths    round    estimate**

2. Ask students why it is important to know how to round numbers. Students should understand that knowing how to round numbers will help them estimate. For example, when shopping at the grocery store, you might need to estimate your total cost before walking up to the cashier. Rounding the cost of each item to the nearest dollar will help to get an estimate of the total cost. For example, if the cost of a loaf of bread is \$1.89, a good estimate would be to round the cost up to \$2.00 since \$1.89 is closer to \$2.00 than \$1.00.
3. Write the decimal 0.568 on chart paper. Have students copy the decimal on a sheet of paper. Say, “Label each place on the decimal with the following words: *tenths*, *hundredths*, and *thousandths*.” Allow students time to label their number. Then, ask student volunteers to label the decimal on the chart paper.
4. After students have finished, write *round* on the chart paper and circle it. Ask, “Are there other words that mean the same thing as *round*?” As students provide answers, draw an idea web with synonyms of the word *round*. Examples may include: *estimate*, *approximation*.

# Rounding Decimals *(cont.)*

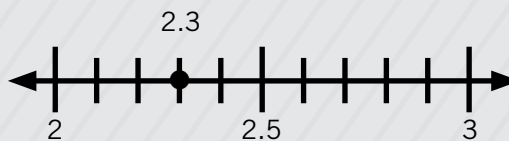
## Whole-Group Lesson (40) min.

### Focus

1. The following lesson will address this focus question:  
*How do you use place value to round decimals?*
2. You may wish to write the focus question on the board and read it aloud to students. Explain that you will revisit the focus question at the end of the lesson.

### I Do

1. Say, "Today we are going to round decimals to the tenths place and hundredths place." Write the following decimal on the board: 2.3.
2. Ask, "What can you tell me about this number?" Students should indicate it is a number that includes a whole number and a part of a whole (decimal). They should note that it extends to the tenths place. Students might discuss what digits are in each place. (*The 2 is in the ones place; 3 is in the tenths place.*) Guide students to discuss the value of the number. (*The number is more than 2 but less than 3.*)
3. Ask, "If I want to place this decimal on the number line, what two whole numbers should it be between?" (*2 and 3*) "How many tenths are between 2 and 3?" (*10*)
4. Draw a number line on the board. Distribute a sheet of paper to each student. Have them make their own number line as you create yours. Ask, "How can I determine where this number goes on the number line?" (*It will be greater than 2 but less than 3.*) Ask, "How do I know exactly where it goes?" (*Look at the tenths place.*) Make 10 equal parts between 2 and 3. Say, "We need to place this dot on 2 and three tenths." Place a dot to show 2.3 on the number line.

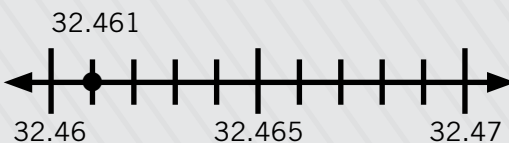


# Rounding Decimals (cont.)

## Whole-Group Lesson (cont.)

I Do  
(cont.)

- Say, "Round 2.3 to the nearest whole number. Explain your answer." Student responses will vary but should show an understanding that the number is between 2 and 3. They should explain that there are three tenths and indicate that three tenths is closer to the whole number 2 than the whole number 3. (*The decimal 2.3 rounds down to 2.*) Students may use the benchmark decimal 2.5 to help them know whether to round up or down.
- Say, "Let's try another example. Round 12.38 to the nearest tenth. Explain your answer." Underline the tenths place. Students should indicate that the answer will include a tenth and that 12.38 is between three tenths and four tenths. They should note that eight hundredths is closer to four tenths than three tenths, so 12.38 would round up to 12.4. Encourage students to draw a number line to explain their reasoning.
- Make sure students understand that rounding numbers is all about the value of digits and that it is place value that determines that value. Write  $32.461$  on the board. Say, "We are going to create a number line to show how to round this number to the nearest hundredth." Draw a number line on the board. Have students create a number line on their papers as well.
- Say, "We are going to zoom in closer on this number line than the last one we made." Ask, "What two hundredths is  $32.461$  between?" (*six and seven hundredths*) Label the number line, and draw lines to indicate the thousandths. Say, "Draw a dot on your number line to show where  $32.461$  is located. What hundredth is it closest to? Tell how you know." (*six hundredths*) Students should indicate it is one thousandth from six hundredths but nine thousandths from seven hundredths. Write  $32.461$  rounded to the nearest hundredth =  $32.46$  on the board.



## Language Support

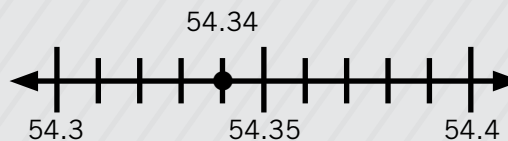
Students may not notice the difference between tens and tenths, hundreds and hundredths, and thousands and thousandths. Write the words next to each other. Emphasize that the *th* at the end of a word means it is a decimal unit, not a whole number. Remind students that decimal place values are equivalent to fractions, or parts of a whole. For example, 0.4 is written as *four tenths* or  $\frac{4}{10}$ , whereas four tens is the whole number 40.

# Rounding Decimals (cont.)

## Whole-Group Lesson (cont.)

**We Do**

1. Refer students to the Nifty Number Lines activity sheet (*Student Guided Practice Book*, page 41). Say, “Let’s round some more decimals using number lines.” Have a student volunteer read Question 1: *Locate 54.34 on the number line.*
2. Say, “When we round 54.34 to the nearest tenth, it falls between 54.3 and 54.4.” Ask, “Which is it closer to?” Say, “Our number is greater than 54.3 but less than the next tenth, 54.4. How can we locate 54.34?” Draw a number line to locate 54.34. If no one suggests it, demonstrate drawing lines to represent hundredths between three tenths and four tenths. Have a student draw a dot to show 54.34. The number line should look like this:



3. Have students work with a partner to explain their reasoning for Question 1. When they have finished, have students volunteer their answers aloud. Students should indicate that 54.34 is closer to 54.3 than 54.4. Ask, “What is 54.34 rounded to the nearest tenth?” (54.3)
4. To help students explain their reasoning, provide them with the following sentence frames:
  - *Since I wanted to round to the \_\_\_\_\_ place, I found the two \_\_\_\_\_ the number was between.*
  - *I found the exact location of the number on a number line to determine which \_\_\_\_\_ it was closest to.*
5. Continue working with students on Question 2. Students will be rounding to the nearest hundredth. Guide students to think about what hundredth 24.567 is closest to using a number line. Then, students will explain their reasoning.

**Whole-Group Lesson** (cont.)**You Do**

1. Refer students to the Closer To... activity sheet (*Student Guided Practice Book*, page 42). Provide the sentence frames from Step 4 of the We Do section to help students explain their reasoning.
2. Have students share their number lines and reasoning. If students have difficulty explaining their reasoning, remind them to use the sentence frames and vocabulary terms.

**Closing the Whole-Group Lesson**

Revisit the focus question for the lesson: *How do you use place value to round decimals?* Discuss how understanding place value added to students' understanding of rounding decimal numbers. Ask students to explain how they would round a decimal number to the nearest tenth and to the nearest hundredth. Ask students how using a number line helped them round decimals. Students should recognize that plotting a decimal number on a number line helps them see the decimal in relation to other numbers.

**Progress Monitoring** (5) min.

1. Have students complete the Quick Check activity sheet (*Student Guided Practice Book*, page 43) to gauge student progress toward mastery of the Learning Objectives.
2. Based on the results of the Quick Check activity sheet and your observations during the lesson, identify students who may benefit from additional instruction in the Learning Objectives. These students will be placed into a small group for reteaching. See instructions on the following page.

# Rounding Decimals (cont.)

## Differentiated Instruction (20) min.

Gather students for reteaching. The remaining students will complete the Independent Practice activity sheet (*Student Guided Practice Book*, page 45) to reinforce their learning and then play the Math Fluency Games.

## Refocus

Revisit the focus question for the lesson: *How do you use place value to round decimals?* Have students draw a number line on a sheet of paper. Write 6.7 on the board. Ask, “What do we know about this number?” Students should recognize that it is a number made up of a whole number and a decimal. Ask, “What two whole numbers does 6.7 fall between?” (*between 6 and 7*)

Draw a number line on the board. Label each end of the number line with the whole numbers 6 and 7, and make tick marks between the numbers so that there are 10 equal parts. Say, “Each of the lines between 6 and 7 represents a tenth.” Point to each line as you count, “One tenth, two tenths, three tenths, etc.” Label the benchmark decimal 6.5 in the middle of 6 and 7. Ask, “How many tenths are in 6.7? Where is it located on the number line?” (*seven tenths, between 6 and 7*) Have students plot the number. Say, “If I were to round this number to the nearest whole number, is it closer to 6 or 7?” (*7*) Say, “We know 6.7 is closer to 7 because seven tenths is closer to 7 than 6. You can use the benchmark decimal 6.5 to help you.”

Support students as they complete Question 1 on the Refocus activity sheet (*Student Guided Practice Book*, page 44). Then, have students solve Question 2 independently.

## Math Fluency Games



Math Fluency Game Sets



Digital Math Fluency Games

## Extend Learning

Ask students how they might round numbers without the use of a number line. Write 4.68 on the board. Say, “Round this number to the nearest tenth.” Students should explain that the number is between 4.6 and 4.7. Have students complete the Lesson 6 Extend Learning Task (filename: extendtask6.pdf).

# Rounding Decimals (cont.)

## Math in the Real World (30 min.)

1. Refer students to the Math in the Real World: Run Grandpa, Run! task (*Student Guided Practice Book*, page 46). Have a student volunteer read the task aloud. Tell students to explain or summarize the task to their partners. Have a few students share their summaries.
2. Ask students to think about what information they will need to solve the task and what the task is asking them to do. Then, have them share with a partner. Ask a few students to share aloud. Students should identify that they know the distance in miles that Morgan ran each week. They need to find out if she rounded to the nearest tenth correctly. Have students work in groups of two or three to complete the task.
3. As students are working, circulate and ask focusing, assessing, and advancing questions:
  - *What is the purpose of rounding a number?*
  - *Did Morgan round each number correctly?*
  - *What does her rounding mean?*

## Sentence Frames for Explaining Reasoning

- *To round to the nearest tenth, Morgan needs to \_\_\_\_\_.*
  - *Morgan's rounding is/is not correct because \_\_\_\_\_.*
  - *When she rounded, she found out \_\_\_\_\_. Instead, she could \_\_\_\_\_.*
4. Observe how students are solving the task, and choose a few groups who solved the task in different ways to share their solutions and reasoning. Try to have the solutions move from concrete representations (number lines) to more abstract representations (place value chart). Make sure students explain their reasoning as they share solutions.
  5. As groups are sharing their solution paths, reasoning, and strategies, ask questions:
    - *Do you agree or disagree with the solution path and reasoning? Why?*
    - *Who can restate \_\_\_\_\_'s strategy/solution path/reasoning?*
    - *Which solution path makes the most sense to you? Why?*

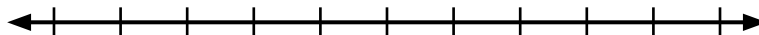
## Lesson Reflection (5 min.)

Have students summarize their learning about using place value to round decimals, and provide feedback on any questions they still have about the content on the Reflection activity sheet (*Student Guided Practice Book*, page 47).

# Rectas numéricas ingeniosas

**Instrucciones:** Responde las preguntas.

- 1 Ubica 54.34 en la recta numérica.



¿Entré cuáles dos décimos se encuentra 54.34?

\_\_\_\_\_

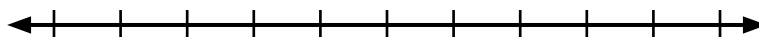
¿A cuál décimo está más cercano? \_\_\_\_\_

Redondea 54.34 al décimo más cercano. \_\_\_\_\_

-  **Explica tu razonamiento.**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 2 Ubica 24.567 en la recta numérica.



Redondea 24.567 al centésimo más cercano. \_\_\_\_\_

-  **Explica tu razonamiento.**

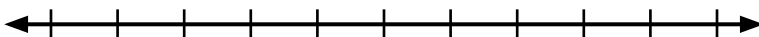
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# Más cercano a...

**Instrucciones:** Responde las preguntas.

- 1 Ubica 61.89 en la recta numérica.



¿Entré cuáles dos décimos se encuentra 61.89?

\_\_\_\_\_

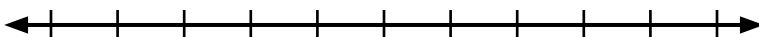
¿A cuál décimo está más cercano? \_\_\_\_\_

Redondea 61.89 al décimo más cercano. \_\_\_\_\_

-  **Explica tu razonamiento.**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 2 Ubica 17.611 en la recta numérica.



Redondea 17.611 al centésimo más cercano. \_\_\_\_\_

-  **Explica tu razonamiento.**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Repaso rápido

**Instrucciones:** Dibuja una línea para relacionar las preguntas con la respuesta correcta.

1

Redondea 45.32 al décimo más cercano.

A 45.4

2

Redondea 45.35 al décimo más cercano.

B 45.33

3

Redondea 45.326 al centésimo más cercano.

C 45.3

D 45.35

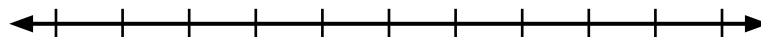
4

Redondea 45.349 al centésimo más cercano.

E 45.2

F 45.32

5 Redondea 89.237 al centésimo más cercano. Usa la siguiente recta numérica. Explica tu razonamiento.




---

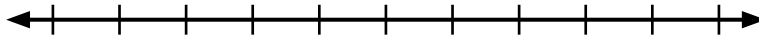


---

# Concéntrate

**Instrucciones:** Responde las preguntas.

- 1 Ubica 4.7 en la recta numérica.



Redondea 4.7 a la unidad más cercana. \_\_\_\_\_

-  Explica tu razonamiento.

---

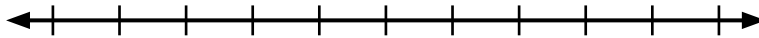


---



---

- 2 Ubica 5.63 en la recta numérica.



Redondea 5.63 al décimo más cercano. \_\_\_\_\_

-  Explica tu razonamiento.

---



---



---

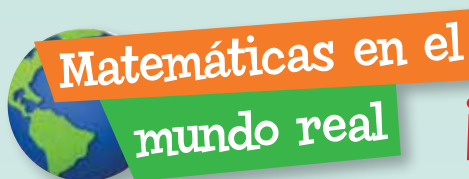
# Práctica independiente

**Instrucciones:** Redondea los números al décimo más cercano.

1 7.23 _____	2 0.25 _____
3 65.02 _____	4 413.148 _____
5 5,321.276 _____	6 7,645.34 _____

**Instrucciones:** Redondea los números al centésimo más cercano.

7 0.341 _____	8 6.086 _____
9 78.450 _____	10 459.918 _____
11 3,489.485 _____	12 5,695.537 _____



# ¡Corre, abuelo, corre!

El abuelo de Morgan la desafió a correr más lejos que él en 10 minutos. Su abuelo tuvo un promedio de 1 milla por cada carrera de 10 minutos. Morgan registró sus datos en la siguiente tabla. Redondeó las distancias al décimo más cercano y notó que corrió la misma distancia cada semana. ¡Y no venció a su abuelo! Morgan cree que su cálculo está mal. ¿Es correcto su redondeo? ¿Cómo lo sabes?

Semana	Distancia en millas	Distancia redondeada
1	0.93	0.9
2	0.941	0.9
3	0.856	0.9
4	0.839	0.9



**Desarma el problema**



**Prepara un plan**



**Solución**



**Repasa y explica**



# Observaciones

- 1 ¿Cómo te ayuda el valor posicional a comprender de qué manera redondear números?

---

---

---

---

- 2 ¿Te resultó útil usar una recta numérica para redondear decimales? ¿Por qué sí o por qué no?

---

---

---

---

## Evaluación diagnóstica

1. Resuelve la siguiente expresión:  
 $\{[(12 + 8) - (4 \div 2)] \times 6\}$ .

(A) 48  
 (B) 60  
 (C) 72  
 (D) 108

3. ¿Qué número es  $\frac{1}{10}$  de 4?

(A) 0.04  
 (B) 0.4  
 (C) 40  
 (D) 400

2. Scott escribió la siguiente expresión:  
 $24 - (6 \times 2.5)$ . ¿Cuál es el valor de su expresión?

(A) 3.5  
 (B) 9  
 (C) 18.6  
 (D) 45

4. ¿Cuánto es  $7 \times 10^4$ ?

(A) 700  
 (B) 7,000  
 (C) 70,000  
 (D) 700,000

## Tarea de desempeño 1: Feria del libro

### Parte A

Hoy es el Día de la Biblioteca en la Escuela Belleview. La Sra. Webb y sus estudiantes de quinto grado ayudan a la Srta. Tan, la bibliotecaria de la escuela, a prepararse para la recolecta de comida enlatada.

1. La Srta. Tan tiene que reorganizar los estantes de libros a fin de dejar espacio para la recolecta de comida enlatada. La Srta. Tan necesita saber cuántos libros hay en los estantes. Cory y Albert se ofrecen como voluntarios para contar los libros de un estante de dos caras y hacer una tabla.

Número de estante	Libros (cara 1)	Libros (cara 2)
1	11	17
2	11	17
3	11	17
4	11	17
5	11	17

- A. Cory dice que sabe que hay 140 libros en los primeros cinco estantes del estante para libros. Explica: “Sumé 11 más 17 y luego multipliqué por 5”. ¿Está Cory en lo correcto? Explica tu razonamiento.

---



---

- B. Albert dice: “Obtuve el mismo número. Primero, escribí la oración numérica  $5 \times (11 + 17)$  y, luego, encontré la solución”. ¿Está Albert en lo correcto? ¿Cómo lo sabes?

---



---

2. Cory y Albert han encontrado cajas de distintos tamaños de tarjetas de biblioteca antiguas. La Srta. Tan quiere empacar las tarjetas en cajas pequeñas con otras tarjetas. Usa la siguiente oración numérica para encontrar la cantidad de paquetes que la Srta. Tan necesitará:  $[15 + 5(500 - 400) + 25]$ . Explica los pasos que seguiste para encontrar la solución.

---



---