

Rounding Numbers to the Nearer Ten or Hundred

About the Math

3.NBT.1

There are times when exact numbers are just not necessary. Instead of telling you that there are 578 students in my school, I might just say there are about 600 students. You don't really need or want the specific number. Did you really want to know exactly how far I drove to get to my grandmother's house over the 3-day drive (126 miles + 97 miles + 165 miles = 388 miles) or did you want to know *about* how many miles I drove (100 + 100 + 200 = 400 miles)? Because accuracy was not critical, I was able to simply round each day's miles to the nearest hundred and I could easily do the math mentally by using the friendlier numbers to find the sum.

The key ideas focused on in this module include:

- rounding whole numbers to the nearer hundred
- rounding whole numbers to the nearer ten
- understanding what rounding is and how it can be used to determine the reasonableness of answers.

Our students' abilities to round numbers make their lives easier in math class and beyond. They are able to talk about quantities using simpler, friendlier numbers. They are able to turn complex problems into simpler problems when an exact answer isn't necessary. And they are able to use their rounding skills to find estimated answers, using those estimates to check the reasonableness of their exact answers.

$$267 + 496 = n.$$

267 is about 300.

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496 is about 500.

The sum will be about 800.

My sum is 763. That makes sense! It is about 800.

Rounding numbers allows our students to estimate answers by doing the computations with approximate rather than exact numbers and aids in their ability to determine the reasonableness of their computations.

Rounding numbers is about finding friendlier numbers that are close in value to the original number. Rounding should simplify our work with numbers, and yet the “rule” for rounding numbers confuses our students, as many rules do. When rounding to the nearer hundred we tell students, “Circle the digit in the hundreds place, then look at the digit to the right of the hundreds place. If that digit is 5 or greater you round up, so add 1 to the hundreds digit. If the digit to the right of the hundreds digit is less than 5, then you round down, which really means you leave the hundreds digit as it is.” This rule focuses solely on the digits. But, rounding numbers is actually all about number sense—seeing the entire number and finding a friendly number that is close in value to it.

Students are introduced to the concept of rounding in third grade and explore rounding numbers to the nearer ten and hundred. This introduction focuses on strengthening our students’ understanding of the value of numbers and should be grounded in students’ understanding of place value, not the memorization of a rule.

Visualizing numbers using a number line supports students as they continue to develop their sense of numbers. When rounding a number to the nearer hundred, students use their place value understanding to determine the hundred before and after the number (e.g., 235 lies between 200 and 300 on a number line) and then decide which of these hundreds is closer to 235. (See Figure 5.1.)

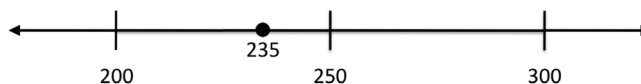


Figure 5.1

In the same way, to round 324 to the nearer ten, students identify the ten before and after the number (e.g., 324 lies between 320 and 330 on a number line) and then decide which of these tens is closer to 324. (See Figure 5.2.)

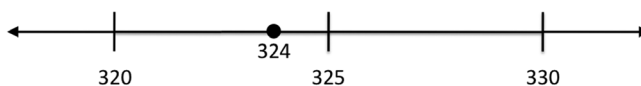


Figure 5.2

When rounding 3-digit numbers, many students find it easier to round to the nearer hundred than the nearer ten. When rounding 325 to the nearer hundred, students simply think of 325 as between 300 and 400. But, when asked to round 325 to the nearer ten, students must think about 325 as between 320 and 330, which can be more difficult for them to visualize. Beginning with rounding to the nearer hundred allows them to become comfortable with the process before moving to rounding to the nearer ten.

Our instructional strategies address the rounding of numbers through place value experiences and a focus on number sense. Using number lines, or building numbers with base-ten blocks, allows our students to visualize the number and find a close, but friendlier, number.

As with all the math we teach, providing a context by posing problems that might require our students to round numbers allows them to figure out when rounding makes sense. Discussions about the difference between exact and approximate answers helps students know when rounding numbers is appropriate (see Figure 5.3).

Problem	What Does It Ask?	What Should We Do?
There were 278 people at the play. About how many people were at the play?	About how many attended?	Round 278 to get an approximate number who attended the play.
There were 278 people at the matinee and 259 people at the evening performance. About how many people saw the play yesterday?	About how many people saw the play yesterday?	We might round 278, round 259, and then add the friendlier numbers to get the approximate number of people who saw the play yesterday.
There were 278 people at the matinee and 259 people at the evening performance. How many people saw the play yesterday?	How many people saw the play yesterday?	Add to find the exact answer.

Figure 5.3 Posing problems and discussing when rounding numbers makes sense build students' understanding of when to apply their rounding skills.

Exploring the Progression

PREVIOUS		NOW		NEXT
Grade 2 Place value understanding to hundreds; identifying midpoint between hundreds	»	Grade 3 Rounding to nearer ten and hundred	»	Grade 4 Rounding multidigit numbers to any place

Although it is a school exercise to ask students to round to the nearer ten or hundred, that doesn't happen when the skill is applied in real situations. We decide how close we want to be to the exact number. Is the nearer hundred close enough? If not, we could round it to the nearer ten.

Learning Goals

I understand what it means to round a number.

I can round numbers to the nearer hundred.

I can round numbers to the nearer ten.

I can use rounding to estimate a sum or difference.

Lessons in This Module

Understanding Rounding to the Nearer Hundred

Rounding to the Nearer Hundred with a Number Line

Build and Round It

Discovering the Rule for Rounding to the Nearer Hundred

Ready, Set, Round

Understanding Rounding to the Nearer Ten

Split the Hundred Chart

More Rounding to the Nearer Ten

Finding the Rule for Rounding to Nearer Ten

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Ideas for Instruction and Assessment

UNDERSTANDING ROUNDING TO THE NEARER HUNDRED

Students are introduced to rounding with visual models and explore the idea of rounding to the nearer hundred. Students use their place value understandings to make sense of the rounding process.

Rounding to the Nearer Hundred with a Number Line

[SHOW IT!](#)

Students are introduced to rounding to the nearer hundred using open number lines. The number lines provide the visual needed for students to discover the place value rule for finding the nearer hundred.

Put the following numbers on the board: 267, 359, 400, 192, 200, 100.

Ask students to think silently about this question:

What makes a number “friendly,” or easy to work with? Are any of these numbers friendly?

Have students turn and talk with partners to identify *friendly* or *nice* numbers from the list on the board. After a few minutes of talking time, ask:

Who would like to share which of these numbers are friendly or nice?

Why? What makes them friendlier than the other numbers?

How would you define a friendly number?

Pose the following problem:

Central Elementary School held a concert. 289 students attended the concert. About how many students attended the concert?

Do you need the exact answer?

What does it mean when the problem asks about how many students attended?

Tell students that one way to decide on the friendlier number is called *rounding*. Tell them that today they will explore ways to round numbers to the nearer hundred to solve problems.

Use a piece of string for a number line and ask two students to hold the ends. Write the following numbers on separate index cards: 200, 300, 250, 225, 289.

Have the student on the left end of the number line hold 200 and the student on the right end hold 300.

Show students the 250 card and ask them to turn to a partner and discuss where it should be placed on the number line.

Where is the 250 card on the number line?

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Have another student hold the 250 card where it belongs at the midpoint of the line.

Show another card, 225. Ask the class to help you place the number in the correct spot on the line. Hold the 225 card by the 250 card in the center.

Is 225 more than 250 or less than 250?

Ask students to point to which direction you should slide the card (closer to 200 or 300). Slide the card from the center to where it belongs (nearer to the 200 card).

Why does it belong here?

Is it closer to 200 or 300? Would 200 or 300 be a better friendly number to use for it?

We would round it to 200!

Have students turn and talk about what it means to round to the nearer hundred (find the closest hundred number to our number).

Repeat the process with another card, 289, this time rounding to 300.

Why did 225 round to 200 and 289 round to 300?

Can anyone think of a different number that would round to 200? What about 300?

Call on students to share. Have other students give a thumbs up if they agree.

Have students work with partners to solve the original problem about Central Elementary School. Move through the room to observe and listen as partners solve the problem.

What is the solution?

If we say “about 300,” do we know exactly how many students attended? Why or why not?

Tell students that rounding will allow them to substitute simpler or friendlier numbers when they don’t need an exact answer.

Give each pair of students a sentence strip and a set of ten sticky notes to create a number line.

Ask students to brainstorm ten numbers between 400 and 500 and put each number on a sticky note. Students should include some numbers that are greater than 450 and some that are less than 450. Have students work with their partners to draw a number line from 400 to 500 on the sentence strip. Partners should draw and label the midpoint number (450) on their number line.

Ask partners to then place each of their numbers where it belongs on their number line and determine whether it rounds to 400 or 500. Circulate and watch as students create their number lines. Can they accurately find the

Students will be getting a visual of the rounding process as they explore the numbers on the number line. Emphasize the closeness of a given number to the start or endpoint of the number line.

midpoint? Are they able to determine the nearer hundred? Ask partners to justify their placements:

Why did 417 round to 400?

Where did 478 go on your number line? So does it round to 400 or 500? Why?

Pose another problem:

Annapolis Mall gave candy to trick-or-treaters during their Halloween festival. They gave out 347 chocolate bars. About how many chocolate bars were given out during the festival?

Have students determine whether this problem needs an exact or approximate answer, and then find the solution with their partners. Remind them to be ready to justify their answers.

Have students share with a partner times when they think they may use rounding. Have a few students share their ideas. Students' ideas may include such things as if you wanted to know about how many students were in their school or about how many students in third grade to pass out something or if you wanted to know about how much money you had in the bank to see if you could buy a toy.

Build and Round It SHOW IT!

Students build numbers with base-ten materials and use these models to help visualize rounding to the nearer hundred.

Have pairs of students build 516 with base-ten blocks.

How many hundreds are in this number? How many tens? How many ones?

Next, have students build the hundred that would come before this number (500) with base-ten blocks and place it to the left of the original number.

Build the hundred that would come after the original number (600) and place it to the right. Have students place their model for 516 roughly where it would go between the two hundreds.

Does the model show that it is more than halfway to the next hundred?

Which hundred is it closer to? Why?

Continue with additional 3-digit numbers. Be sure to have students justify their answers each time.

Ask students to turn and talk to a partner:

What are the similarities and differences between rounding like this and rounding on a number line?

Have students share their ideas.

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Most of the same activities that students completed when rounding to the nearer hundred can also be used when they are introduced to rounding to the nearer ten. This has several benefits: it helps students make connections with the rules about rounding and they are already familiar with the general directions for the activity. For more on rounding to the nearer ten, see p. 146 of this module.

Thinking Through a Lesson

SMP6; SMP7; SMP8

Discovering the Rule for Rounding to the Nearer Hundred

Students round numbers to the nearer hundred with number lines and then observe to find a rule for rounding numbers without using models.

Pose 3-digit numbers between 200 and 300. For example: 287, 235, 277, 211, 269, 249.

What hundred comes before all of these numbers? (200.)

What hundred comes after all of these numbers? (300.)

What is the midpoint between 200 and 300? (250.)

Have students work with partners to use number lines with endpoints of 200 and 300 to round each number to the nearer hundred. Ask questions such as the following as you circulate:

What number would be the midpoint on this number line? How do you know?

Why did you say 235 would round to 200?

Gather students together and record the data on the board using a T-chart with Numbers Closer to 200 and Numbers Closer to 300 headings. Have students share which numbers belong under each heading.

Give students time to observe the data.

Have students turn and talk to a partner based on the questions below.

What do you notice about numbers that round to 200? (They are all less than 250.)

What do you notice about numbers that round to 300? (They are all more than 250.)

Does that make sense? Why? (Yes, because 250 is right between 200 and 300.)

Have students repeat the process with 709, 759, 799, 723, 771, and 745.

What do you notice about numbers that round to 700? (They are all less than 750.)

What do you notice about numbers that round to 800? (They are all greater than 750.)

How does knowing the midpoint help you determine whether a number rounds to the hundred before or after that number? (It helps you figure out which hundred it is closer to.)

Can anyone share a rule that they think will work when rounding a number to the nearer hundred? (Look to see if it is more or less than the midpoint.)

Does everyone agree? Can anyone add on to what was said? (You could look at the tens digit to see if it is more or less than 5.)

What about 750? What do you think we should do with that number?

Differentiation

Are students able to identify the hundred before and the hundred after without any visual model? If not, students may need more practice with an open number line or building the numbers with base-ten blocks before moving on to this lesson.

Look for students to realize that numbers with less than 5 tens round down and numbers with 5 or more tens round up. If students are not able to yet come to that generalization, provide additional examples for them.

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Students may have different suggestions.

Mathematicians have agreed that when the number is right in the middle, we round it up to the next hundred. So what is 750 rounded to the nearer hundred? (800.)

Ask students to write in their journals a rule for rounding to the nearer hundred that would explain it to a friend who is absent today. Tell students to use pictures, numbers, and words to explain their thinking so that their friend will have a clear understanding.

Review students' journals to see if they show a clear understanding of rounding. Are they able to explain the process as well as give examples? Students' responses will help you determine if they are ready to move on to rounding to the nearer ten or if they need more practice with rounding to the nearer hundred.

Ready, Set, Round

Students use rounding to estimate sums and differences.

Tell students that today they will be using their rounding skills to estimate the answers to addition and subtraction problems.

What does it mean to estimate?

So how do you think we will use rounding to estimate sums and differences?

Why might we estimate?

If no student suggests using an estimate to check whether an answer makes sense, suggest that as a possibility.

Write $389 + 412$ on the board. Have students turn and talk to a partner about what a reasonable answer would be using rounding to the nearer hundred. Allow students to share their ideas.

Do you agree? Thumbs up if you and your partner also thought that. Did anyone have a different answer?

Find the sum using any strategy you like.

Does your answer seem reasonable based on our estimate?

Have students try additional problems such as $576 + 134$, $398 + 590$, or

$410 - 295$.

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Be sure to have students share their rounded sum or difference and their justification each time.

For closure, have students try two problems in their journal.

FORMATIVE ASSESSMENT

Give each student a dry erase board and a marker. Tell students that you will write a number on the board and tell them what the number is when rounded to the nearer hundred. If you are correct, they will write *yes* on their board. If you are incorrect, they will write *no* on their board. On the signal of 1, 2, 3, they will flip their boards to show you.

- 572 rounded to the nearer hundred is 500.
- 911 rounded to the nearer hundred is 900.
- 454 rounded to the nearer hundred is 500.
- 235 rounded to the nearer hundred is 300.

Provide additional examples as necessary. As students respond look for patterns:

- Do students look for or draw models (number lines, base-ten model) before responding?
- Are students comfortable with rounding to the next hundred, but confused when rounding to the prior hundred?

Use these observations to assist you in grouping for future lessons and practice activities.

Additional Ideas for Support and Practice

The following ideas extend students' understanding of rounding to the nearer hundred and provide meaningful practice. Note that many of these ideas can be adapted for use with rounding to the nearer ten as well (see pages 146–151).

BUILDING NUMBER LINES

Students work with partners to create 3-digit numbers from digit cards, identify the hundred before and the hundred after, and practice their rounding skills.

Pair students with a partner. Have students draw a number line and pick three digit cards to create a 3-digit number.

What hundred would come before this number?

What hundred would come after this number?

What number would be the midpoint between these two numbers?

How do you know?

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Have students place their number where it fits.

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Is our number more or less than the midpoint?

So which hundred would your number round to? Why?

Circulate as partners work to observe and ask clarifying questions to guide thinking when needed.

0–1000 NUMBER LINE

Differentiation

Students who have weak place value understanding will need additional support. Are students able to identify the hundred before and after a 3-digit number? Are students able to identify the midpoint between 100 and 200 when rounding to nearer hundred? The 0–1000 Number Line activity can assist with this.

Students who have difficulty identifying the hundred before and the hundred after a number practice placing 3-digit numbers on a 0–1000 number line marked by hundreds.



Create on the board or on chart paper a hundreds number line for those students who struggle with identifying the hundred before and after a given number. Have students use the number line to identify between which two hundreds a 3-digit number would fall. The numbers to the left and right would be the endpoints of their number line.

Variation: Use a 0–100 number line marked in tens to round to the nearer ten.

UP THE HILL OR DOWN?

Students use a “hill” to visualize and practice rounding to the nearer hundred.

Draw an arched number line on chart paper or the board to show 200–300. 250 is at the peak of the arch just beginning to curve down like the top of the hill. Have students imagine a car driving up the hill.

Imagine the car ran out of gas at 230.

What do you think would happen to the car? Why? (It would roll back to 200.)

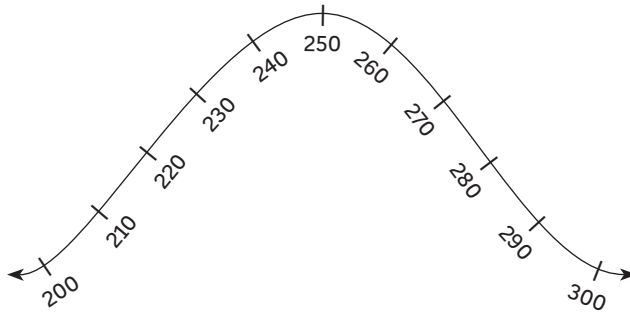
What if the car ran out of gas at 270? What would happen to the car? Why? (It would roll forward to 300.)

Why is the midpoint 250 an important point on this hill?

Use the incline or decline of the hill to talk about the nearer hundred.

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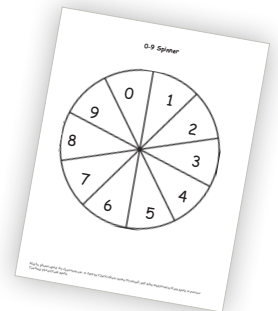
Provide additional examples using the arched number line with varying endpoints.

PARTNER ROUND UP

Students create 3-digit numbers with dice or by spinning. They practice rounding to the nearer hundred and practice their addition skills by determining the sum of their rounded numbers.

Students roll a 0–9 number cube or spin a spinner three times to create a 3-digit number. The first roll is the hundreds digit, second roll is the tens digit, and third roll is the ones digit. Students round it to the nearer hundred.

After three turns, students add to find the sum of the numbers that they rounded. The greater sum wins.



Differentiation: Roll two times and round 2-digit numbers to the nearer ten.

WHERE DOES IT GO?

Students create a game board and practice rounding to the nearer hundred.

Students fold a paper into six sections and label them 100, 200, 300, 400, 500, 600.

Then students roll a die three times. The first roll is the hundreds digit, second roll is the tens digit, and third roll is the ones digit.

Students round the number to the nearer hundred and record the number rolled in the section that shows the nearer hundred.

If the number rounds to 700, the student passes on that turn.

The first one to have a number in all six sections wins.

TALK ABOUT IT/WRITE ABOUT IT

Melanie said 346 rounded to the nearer hundred is 400. Do you agree or disagree? Justify your answer.

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UNDERSTANDING ROUNDING TO THE NEARER TEN

Students continue to use place value understanding and models to extend their understanding of rounding numbers to the nearer ten.

Split the Hundred Chart SHOW IT

Students use a modified hundred chart to help visualize rounding to the nearer ten.

Use the modified hundred chart to introduce rounding to the nearer ten.

Distribute the modified hundred chart to students. Ask:

Do you notice anything different about this hundred chart than the one we usually use?

Explain that this modified hundred chart does not show the numbers as we count them, like the typical hundred charts we use, but will help us better understand rounding.

Have students use a blue marker or crayon to outline the decade numbers (multiples of 10) along the left side in blue. Have students use a red marker or crayon to outline the decade numbers along the right side.

The term decade number may be new to students. Be sure to introduce it in context and add it to your word wall or Math Talk chart.

Modified Chart for Rounding

0	1	2	3	4	5	6	7	8	9	10
10	11	12	13	14	15	16	17	18	19	20
20	21	22	23	24	25	26	27	28	29	30
30	31	32	33	34	35	36	37	38	39	40
40	41	42	43	44	45	46	47	48	49	50
50	51	52	53	54	55	56	57	58	59	60
60	61	62	63	64	65	66	67	68	69	70
70	71	72	73	74	75	76	77	78	79	80
80	81	82	83	84	85	86	87	88	89	90
90	91	92	93	94	95	96	97	98	99	100

Have students put their finger on the number 32.

What two colored numbers is 32 between? Is it closer to 30 or 40?

So which of these tens do you think 32 will round to? Why?

What do you notice about the numbers with a 5 in the ones place on this hundred chart?

What do you think should happen to those numbers?

Be sure that students understand that we have changed the hundred chart to help us visualize rounding numbers. They would not usually see two tens on a hundred chart or two twenties, but we are visualizing each decade including the start and end numbers of the decade. By placing the decade numbers at each end, students are able to visualize the fives as directly in the middle.

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Mathematicians have decided that we round up when the number is right at the halfway point, so that we all round in the same way.

Have students do several more examples, each time discussing if the number is closer to the decade number in blue on the left or in red on the right.

After several examples, have students discuss their observations with a partner.

What do you notice about the numbers that round to the blue decade numbers?

What do you notice about the numbers that round to the red decade numbers?

Ask students to share with a partner when they think it would be helpful to round numbers to the nearer ten, then have students share their ideas with the class.

More Rounding to the Nearer Ten

Students expand their experience with rounding to the nearer ten with three-digit numbers.

Pose the following problem:

Colin had 143 pencils. About how many pencils did he have?

Students will likely think about rounding to the nearer hundred and answer “about 100.” Point out that 143 is still a long way from 100.

Is there a way we could round the number to get closer to the exact amount?

Have students begin at 100 and count aloud by tens to 200—100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200.

Which of these tens is just before 143? Which is just after?

Draw an open number line on the board with endpoints 140 and 150.

Have students turn and share with a partner which endpoint is closer to 143.

Would we round 143 to 140 or 150 if we are rounding to the nearer ten? Why?

Try a few more examples of rounding to the nearer ten. Examples might include 567 students in a school or 422 animals at the zoo. Each time, be sure to discuss the hundred before and after, to skip count by tens using those as your starting and stopping point, and to draw an open number line. These visual and auditory cues help students generate and understand their own rules for rounding.

Common Error or Misconception

Rounding to the nearer ten with 3-digit numbers can be difficult for students because they are no longer just rounding the digit with the greatest value. They must reason what ten would come before and after a number. Even students who appeared to master rounding to the nearer ten with 2-digit numbers may struggle with 3-digit numbers.

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Finding the Rule for Rounding to Nearer Ten

Students continue to use a number line to practice rounding 3-digit numbers to the nearer ten, then come together to generate a rule for rounding to the nearer ten.

Write the following 3-digit numbers on the board: 216, 213, 211, 219.

What decade numbers come before and after all of these numbers?

Have students work with partners to draw number lines with 210 at the start and 220 at the end and round each number. Then, as a whole class, have students share their answers. Record the data on the board. Give students a minute or two to observe the data. Have students turn and talk to a partner:

What do you notice about numbers that round to 210? What do you notice about numbers that round to 220?

Repeat the process with the following numbers: 981, 985, 989, and 983.

Can anyone share a rule that they think will work for rounding a number to the nearer ten?

Does everyone agree? Can anyone add on to what was said?

Repeat with additional examples if needed.

Have students write in their journals their rule for rounding to the nearer ten. Ask them to give examples. Examine students' responses to determine next instructional steps and grouping needs.

FORMATIVE ASSESSMENT

Pose the following:

Round to the nearer ten or hundred.

634 630 600 182 180 200
Nearest 10 Nearest 100 Nearest 10 Nearest 100

516 520 500 798 700 800
Nearest 10 Nearest 100 Nearest 10 Nearest 100

Some errors may best be addressed with a quick individual student interview. Did this student just read the last question wrong because he had clearly rounded correctly both up and down to the nearer ten on other examples? Or is there a more fundamental conceptual issue? An interview can help clarify.

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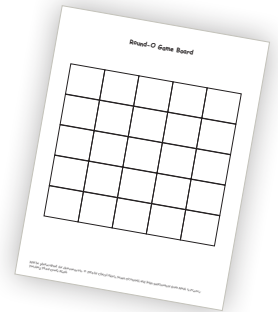
Additional Ideas for Support and Practice

The following ideas extend students' understanding of rounding to the nearer ten and provide meaningful practice. Note that many of the practice activities from the previous section on rounding to the nearer hundred (p. 141) can be adapted to use with rounding to the nearer ten.

ROUND-O

Students create custom game boards to practice rounding to the nearer ten.

On a blank 5-by-5 Round-O grid, have students place the values 10, 20, 30 . . . 100, twice each, anywhere on their board. They then fill in the remaining five spots with any multiple of 10 they choose. Once students have created their customized game board, the teacher rolls two 0–9 dice or spins a 0–9 spinner and writes the two digits on the board. The students can decide which order to use the digits in (e.g., 65 or 56). They round the number to the nearer ten and cover the number that it rounds to. Play continues until one student has five in a row horizontally, vertically, or diagonally. When they do, they shout “Round-O!”



COYOTES ALL AROUND

Students discuss how the main character in the story used a number line to assist in rounding and then use an open number line to practice rounding to the nearer ten.

In this story, the counting coyotes round 2-digit numbers to the nearer ten to determine how many roadrunners, lizards, and grasshoppers they see in the desert.

Before Reading:

Listen for ways the coyote uses rounding in this story.

During Reading:

Read *Coyotes All Around* by Stuart J. Murphy.

After Reading:

Reread the story and have students point out how Clever Coyote uses the number line to round each of the numbers.

Pose similar problems for students to practice their rounding skills.

Have a number line nearby to support their thinking if needed.

ROUND UP CARD GAME



Students use the digit cards from a deck of cards to create 3-digit numbers and practice rounding to the nearer ten.

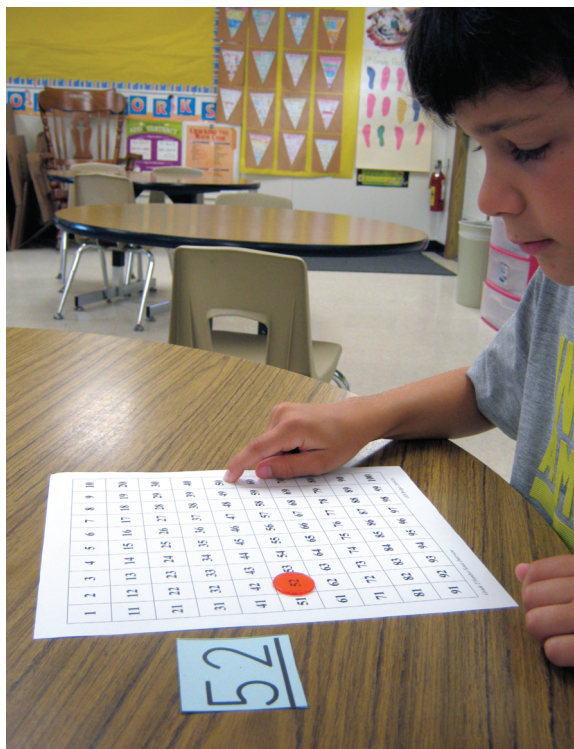
Take the kings, queens, and tens out of a deck of cards (jokers and aces = 1) and place the deck facedown between players.

Players take turns drawing three cards and using them to make the largest possible 3-digit number.

Each player then rounds his number to the nearer ten, and the player with the highest number earns 1 point.

Play continues for a designated amount of time.

Differentiation: Draw two cards and round to the nearer ten.



This student uses a hundred chart to support rounding to the nearer ten.

ROUNDING CHALLENGE



Students combine rounding and computation in this extension activity.

Challenge students who are ready by posing computation problems that require rounding to the nearer ten or hundred.

Some students may benefit from being allowed the choice to use a hundred chart as a tool during practice activities to help them visualize rounding numbers.

There are 358 boys and 423 girls in the school. About how many students are in the school?

Sample module from Math in Practice: Teaching Third-Grade Math
More information at <http://MathInPractice.com>

What do you get if you round to the nearer hundred?

What do you get if you round to the nearer ten?

Are both answers close together?

Will this always be true?

TALK ABOUT IT/WRITE ABOUT IT

There were 463 children at the spring carnival. About how many students attended?

Kara's answer was that about 500 children attended, but Jorge disagreed. He claimed the answer was 460. The teacher explained that they were both correct. How could this be? Explain your answer using numbers, pictures, and/or words.

Oakview Elementary School held a spring carnival. 332 Oakview students attended along with 173 children from other schools. About how many children attended the carnival?

Chelsea said about 500 children attended. Explain how she may have rounded. Would the answer remain the same if she rounded to a different place? Is this always true? Give an example of when rounding to the nearer ten or hundred would give you different answers.

Explain how to round 265 to the nearest ten.

For more strategies to encourage math talk, see Math in Practice: A Guide for Teachers, Chapter 4.

Vocabulary

about	exact
approximate	midpoint
decade	round
number	
estimate	

General Resources

0–9 Spinner
Additional Problems
Digit Cards
Modified Hundred Chart
for Rounding

ONLINE RESOURCES

Resources for Specific Activities

Round-O Game Board

These resources are
available at 




Heinemann Publishing

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