Just In Time Quick Check

Standard of Learning (SOL) 3.1b

Strand: Number and Number Sense

Standard of Learning (SOL) 3.1b

The student will round whole numbers, 9,999 or less, to the nearest ten, hundred, and thousand.

Grade Level Skills:

- Round a given whole number, 9,999 or less, to the nearest ten, hundred, and thousand.
- Solve problems, using rounding of numbers, 9,999 or less, to the nearest ten, hundred, and thousand.

Just in Time Quick Check

Just in Time Quick Check Teacher Notes

Supporting Resources:

- VDOE Mathematics Instructional Plans (MIPS)
 - o <u>3.1b Round It</u> (Word) / (PDF)
 - <u>3.1b Rounding Whole Numbers</u> (Word) / (PDF)
 - o <u>3.1abc Place Value Mat Activities</u> (Word) / (PDF)
- VDOE Word Wall Cards: Grade 3 (Word) / (PDF)
 - o Round
 - Place Value Position
- VDOE Instructional Videos for Teachers
 - o Using a Beaded Number Line Grades K-2

Supporting and Prerequisite SOL: 3.1a, 2.1a, 2.1d

Virginia Department of Education

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SOL 3.1b - Just in Time Quick Check

1.	Round these numbers to the nearest ten.					
	224 rounds to	159 rounds to	2,795 rounds to			
	Round these numbers to the nearest hundred.					
	172 rounds to	354 rounds to	5,993 rounds to			
	Round these numbers to the nearest thousand.					
	7,356 rounds to	8,612 rounds to _				
h	Change all the numbers that your	d to 2 C70 when reunded to the				

2. Choose all the numbers that round to 3,670 when rounded to the nearest ten.

3,674	3,700	3,679
3,665	3,647	3,662

SOL 3.1b - Just in Time Quick Check Teacher Notes

Common Errors/Misconceptions and their Possible Indications

1. Round these numbers to the nearest ten.

224 rounds to	159 rounds to	2,795 rounds to			
Round these numbers to the nearest hundred.					
172 rounds to	354 rounds to	5,993 rounds to			
Round these numbers to the nearest thousand.					
7,356 rounds to	8,612 round	s to			

When rounding to the nearest ten, students who round 224 to 240 demonstrate an understanding that the ones place will have a value of zero after rounding but a confusion about what to do with the original value in the ones place. These students may benefit from experiences modeling two-digit, three-digit, and four-digit numbers that have the same values in the ones and tens places (e.g., 37, 137, and 4,137) on a number line before rounding each to the nearest ten. Students may also benefit from guided practice using a place value mat and place value manipulatives in order to build an understanding of which digit is in which place, what the number looks like visually, and which digit is used to make the rounding decision.

The most common error when rounding three- or four-digit numbers to the nearest hundred or thousand is using the value of the digit in the ones place to make the rounding decision. These students may be using part of a rote procedure learned for rounding one- and two-digit numbers to the nearest ten. Modeling the rounding process using a number line may help students build conceptual understanding for rounding.

Students may have difficulty when a number becomes a multiple of one thousand when rounded to the nearest hundred. For example, 5,993 rounds to 6,000 when rounded to the nearest hundred AND when rounded to the nearest thousand. Provide practice rounding numbers such as 295, 397, and 698 to the nearest ten AND to the nearest hundred as well as rounding numbers such as 984, 7,951, and 5,980 to the nearest hundred AND to the nearest thousand.

2. Choose all the numbers that round to 3,670 when rounded to the nearest ten.

3,674	3,700	3,679
3,665	3,647	3,662

A variety of errors may occur in this activity. For example:

- Students who do not choose 3,674 (and students who do choose 3,662) may be rounding to each place using the value in that place. For example, these students may round 3,662 to 3,660 because of the 2 ones and then round 3,660 to 3,670 because of the 6 tens.
- Students who choose 3,700 may be rounding to the nearest hundred instead of to the nearest ten.
- Students who choose 3,647 may be reversing the positions of the digits when rounding.

Students who have difficulty rounding four-digit numbers to the nearest ten may benefit from additional practice rounding two- and three-digit numbers to the nearest 10. Additional practice using four-digit numbers to count by tens (or by hundreds when rounding to the nearest hundred) and modeling that skip counting on a number line may also be helpful.