

Lesson 14: Nearest Multiples of 10 and 100

Standards Alignments

Building On	2.NBT.B.8
Addressing	3.NBT.A.1
Building Towards	3.NBT.A.1

Teacher-facing Learning Goals

- Identify the closest multiples of 10 and 100 for numbers within 1,000.
- Understand that rounding is a formal way to say which number a given number is closer to, and that number is often a multiple of 10 or 100.
- Understand the meaning of “the closest multiple of 10.”

Student-facing Learning Goals

- For a given number, let’s find the closest multiple of 100 and the closest multiple of 10.

Lesson Purpose

The purpose of this lesson is for students to reason about the position of numbers relative to their immediate multiples of 10 and 100, using number lines to do so.

In a previous lesson, students reasoned about the nearest multiple of 100 to a given number. In this lesson, students extend this work to include multiples of 10. The work here prepares students to round numbers to the nearest ten and hundred in upcoming lessons.

Number lines are still a central representation early in the lesson. Later in the lesson, students begin to reason numerically and think about how they could find the nearest multiple of 10 or 100 if a number line is not provided. Students should be encouraged to consider alternative strategies and use what they know about place value, but can still draw a number line if it is needed. In the lesson synthesis, students learn that **rounding** is a formal way to say which number a given number is closer too, and that number is often a multiple of 10 or 100.

Access for:

Students with Disabilities

- Engagement (Activity 1)

English Learners

- MLR2 (Activity 2)

Instructional Routines

Estimation Exploration (Warm-up)

Lesson Timeline

Warm-up	10 min
Activity 1	20 min
Activity 2	15 min
Lesson Synthesis	10 min
Cool-down	5 min

Teacher Reflection Question

In this lesson students are encouraged to begin reasoning numerically about finding the nearest multiple of 10 or 100. What evidence did you see of such reasoning?

Cool-down (to be completed at the end of the lesson)

 5 min

Closest Multiple of 10 and 100

Standards Alignments

Addressing 3.NBT.A.1

Student-facing Task Statement

1. What is the nearest multiple of 100 to 162? Is it 100 or 200? Explain or show your reasoning.
2. What is the nearest multiple of 10 to 162? Is it 160 or 170? Explain or show your reasoning.

Student Responses

1. 200. Sample response: 150 is right in between and 162 is greater, so it's closer to 200 than to 100.
2. 160. Sample response: From 162, it's 8 counts up to get to 170, but only 2 counts back to 160, so 160 is closer than 170.