

Lesson 14: Think Before You Subtract

Standards Alignments

Addressing 2.NBT.A.1, 2.NBT.B.7, 2.NBT.B.9

Teacher-facing Learning Goals

- Subtract a two-digit number from a three-digit number using place value strategies that include decomposing 2 units.

Student-facing Learning Goals

- Let's think about decomposing before we subtract.

Lesson Purpose

The purpose of this lesson is for students to analyze expressions to determine if a unit will be decomposed before subtracting.

In a previous lesson, students subtracted from a three-digit number and decomposed a ten or a hundred to subtract by place. Students represented their thinking with base-ten blocks, drawings, words, or numbers and explained the steps of their method.

In this lesson, students subtract two-digit numbers from three-digit numbers when 2 units are decomposed. Students are encouraged to attend to the details of the numbers in each expression to decide whether or not any units will need to be decomposed before subtracting (MP7). Throughout the lesson, students explain their reasoning and critique their peers' reasoning as they use their understanding of place value to analyze expressions and plan their methods (MP3).

Access for:

Students with Disabilities

- Action and Expression (Activity 2)

Instructional Routines

Which One Doesn't Belong? (Warm-up)

Materials to Gather

- Base-ten blocks: Activity 1, Activity 2

Lesson Timeline

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

Teacher Reflection Question

What connections did students make between the different methods and reasoning shared in today's lesson? What evidence are you seeing that students' are using their understanding of place value to make sense of expressions and other's methods for subtraction?

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

 5 min

Decompose? Maybe.

Standards Alignments

Addressing 2.NBT.B.7

Student-facing Task Statement

Han wants to subtract by place to find the value of these expressions.

$463 - 38$

$463 - 52$

$463 - 75$

- Han wants to start by subtracting without decomposing any units.
 - Which expression should he choose?
 - Find the value of the expression. Show your thinking.
- Choose an expression that Han will need to decompose a unit if he subtracts by place.

$463 - 38$

$463 - 52$

$463 - 75$

- Write the expression and explain your choice.
- Find the value of the expression. Show your thinking.

Student Responses

- $463 - 52$
 411. Sample response:
 - $3 - 2 = 1$

$$60 - 50 = 10$$

$$400 + 10 + 1 = 411$$

2.
 - a. Sample response: $463 - 75$ because there aren't enough tens or ones for Han to subtract by place without decomposing any units.
 - b. Sample response: Students draw a base-ten diagram that shows 463 as 4 hundreds, 5 tens, and 13 ones. Students show decomposing 1 hundred, to make 10 tens. They cross out 7 tens and 5 ones and clearly label to show the difference as 388.