Lesson 16: Subtract Within 1,000

Standards Alignments

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

Teacher-facing Learning Goals

- Subtract numbers within 1,000 using strategies based on place value and the properties of operations.

Student-facing Learning Goals

- Let's subtract in a way that makes sense.

Lesson Purpose

The purpose of this lesson is for students to choose methods for finding the value of differences based on the numbers being subtracted.

In previous lessons, students found subtracted using various methods and representations with an emphasis on strategies based on place value. They analyzed numbers to anticipate whether they may need to decompose one or more units to subtract.

In this lesson, students attend to the relationship between numbers in expressions to flexibly subtract. Although the focus of this section has been on interpreting and using methods based on place value, the number choices in this lesson are intended to also encourage the strategies students used in prior sections. Throughout this lesson, students explain their thinking and listen to and critique the reasoning of others (MP3).

This lesson has a Student Section Summary.

Access for:

⊕ Students with Disabilities

- Engagement (Activity 2)

Instructional Routines

MLR8 Discussion Supports (Activity 1), True or False (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

How are students using their understanding of number relationships and place value to choose their methods for subtracting? What more can be done to help students recognize and plan for the units they need to decompose when subtracting by place?

Cool-down (to be completed at the end of the lesson)   🕐 5 min

Find the Difference Your Way

Standards Alignments

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

Student-facing Task Statement

$324 - 157$ $500 - 185$ $712 - 299$ $822 - 365$

1. a. Choose one expression and find the value by subtracting by place. Show your thinking.

    b. Explain why you chose that expression.

$324 - 157$ $500 - 185$ $712 - 299$ $822 - 365$

2. a. Choose a different expression and find the value using a different method. Show your thinking.

    b. Explain why you chose that expression.

Student Responses

1. a. Sample response: $324 - 157$
        Students use a base-ten diagram to show 324 as 3 hundreds, 2 tens, and 4 ones. Students show decomposing 1 hundred and 1 ten. Students show subtracting 1 hundred, 5 tens, and 7 ones and label to show the difference as 167.

    b. Sample response: I chose $324 - 157$ to subtract by place because I knew I would decompose and didn't see a way to make friendly numbers.

2. a. Sample response: $712 - 299$
    $712 - 300 = 412$
    $412 + 1 = 413$

    b. Sample response: I chose $712 - 299$ to use a different method because I know 299 is really close to 300 and I can take away hundreds in my head. I added 1 more because I took away 1 too many.