Lesson 5: Expanded Form of Numbers

Standards Alignments

Addressing	2.NBT.A.1, 2.NBT.A.3
Building Towards	2.NBT.A.4

Teacher-facing Learning Goals

- Read, write, and represent three-digit numbers using base-ten numerals and expanded form.

Student-facing Learning Goals

- Let's represent three-digit numbers as a sum of the value of each digit.

Lesson Purpose

The purpose of this lesson is for students to use expanded form and base-ten numerals to represent numbers within 1,000.

In previous lessons, students represented three-digit numbers by recording how many of each unit (for example, 357 as 3 hundreds, 5 tens, 7 ones). They also connected representations of a number using the fewest number of base-ten blocks to the value of the digits in three-digit numbers.

In this lesson, students extend their understanding of ways to express the value of the digits in three-digit numbers to include **expanded form**. They represent three-digit numbers as the sum of the value of each digit (for example, $357 = 300 + 50 + 7$).

Access for:

Students with Disabilities

- Action and Expression (Activity 2)

English Learners

- MLR8 (Activity 1)

Instructional Routines

True or False (Warm-up)

Materials to Gather

- Base-ten blocks: Activity 1
- Number cubes: Activity 2

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

As students represented numbers in expanded form and as three-digit numbers, what evidence did you see that they understand place value?

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

5 min

Three-digit Numbers in Expanded Form

Standards Alignments

Addressing 2.NBT.A.1, 2.NBT.A.3

Student-facing Task Statement

1. Represent the number 375 as the sum of hundreds, tens, and ones.

   Expanded form: _____

2. Represent $200 + 40 + 7$ as a three-digit number.

   Three-digit number: _____

Student Responses

1. $300 + 70 + 5$
2. 247