# 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) 5min

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: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Represent $200+40+7$ as a three-digit number.
* Three-digit number: \_\_\_\_\_\_\_\_\_\_\_\_

### Student Responses

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