Lesson 9: Mismo dígito, distinto valor

Standards Alignments

Addressing   4.NBT.A.1, 4.NBT.A.2

Teacher-facing Learning Goals

- Describe that the value of a digit in one place represents ten times what it represents in the place to its right.

Student-facing Learning Goals

- Describamos la relación que hay entre los dígitos de un número de varios dígitos.

Lesson Purpose

The purpose of this lesson is to describe the value of a digit in one place as having ten times the value of the same digit in a place to its right.

This lesson shifts the focus from reading and writing numbers to describing the multiplicative relationship between place values in a multi-digit number. In previous lessons, students used base-ten blocks to represent large numbers, and wrote numbers in expanded form. In this lesson, they use their developing understanding of the value of a digit to begin to articulate that a digit in one place is ten times the value as the same digit in a place to its right.

The syntheses in this lesson help students connect the language of "ten times the value" to equations to help them represent this concept.

Access for:

⬤ Students with Disabilities

- Representation (Activity 1)

🌐 English Learners

- MLR2 (Activity 2)

Instructional Routines

Card Sort (Activity 1), True or False (Warm-up)

Materials to Copy

- Card Sort: Large Numbers (4 to 6 digits) (groups of 2): Activity 1

Lesson Timeline

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

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

El valor de los dígitos

Standards Alignments

Addressing   4.NBT.A.1, 4.NBT.A.2

Student-facing Task Statement

Estos son dos números: 531,690 y 58,487.

1. Escribe cada número en forma desarrollada.
2. Escribe una ecuación de multiplicación para representar la relación que hay entre los valores del dígito 5 en ambos números.

Student Responses

1. $500,000 + 30,000 + 1,000 + 600 + 90$, $50,000 + 8,000 + 400 + 80 + 7$
2. $50,000 \times 10 = 500,000$