Lesson 8: Algoritmos de resta (parte 1)

Standards Alignments

Addressing   3.NBT.A.2

Teacher-facing Learning Goals

- Relate base-ten diagrams to written algorithms for subtraction.

Student-facing Learning Goals

- Aprendamos una nueva forma de restar.

Lesson Purpose

The purpose of this lesson is for students to use their knowledge of base-ten diagrams to make sense of a written subtraction algorithm.

In previous lessons, students revisited subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction. In this lesson, students are introduced to a subtraction algorithm that clearly shows the subtraction of ones from ones, tens from tens, and hundreds from hundreds, and is similar to one of the initial addition algorithms in a prior lesson. Students should have access to base-ten blocks as needed.

Access for:

♿ Students with Disabilities

- Engagement (Activity 2)

🌐 English Learners

- MLR8 (Activity 2)

Instructional Routines

Card Sort (Activity 2), Number Talk (Warm-up)

Materials to Copy

- Diagrams and Algorithms (groups of 2): Activity 2

Lesson Timeline

Warm-up	10 min
Activity 1	15 min

Teacher Reflection Question

Reflect on how comfortable your students are asking questions of you and of each other. What can you do to encourage students to ask questions?

Activity 2	20 min
Lesson Synthesis	10 min
Cool-down	5 min

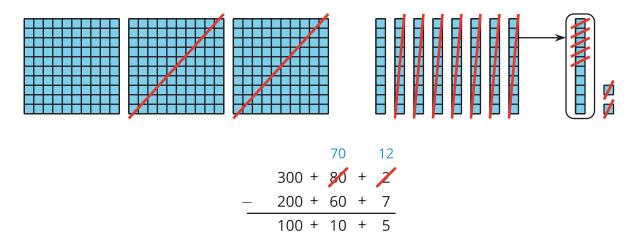# Cool-down (to be completed at the end of the lesson)   🕐 5 min

Conecta un diagrama con un algoritmo

Standards Alignments

Addressing   3.NBT.A.2

Student-facing Task Statement

Explica cómo el diagrama corresponde al algoritmo.

$$\begin{array}{r}
\overset{70}{} \quad \overset{12}{} \\
300 + \cancel{80} + \cancel{2} \\
-\quad 200 + 60 + 7 \\
\hline
100 + 10 + 5
\end{array}$$

Student Responses

Sample response: I can see that there are 3 hundreds, 8 tens, and 2 ones, but one of the tens has been moved over to get more ones. In the algorithm, the 80 and 2 are crossed out to show this. The blocks that are not crossed out show the $100 + 10 + 5$ in the algorithm.