

Lesson 4: Introduction to Addition Algorithms

Standards Alignments

Addressing 3.NBT.A.2

Teacher-facing Learning Goals

- Add within 1,000.
- Relate base-ten diagrams to written algorithms for addition.

Student-facing Learning Goals

- Let's learn new ways to add.

Lesson Purpose

The purpose of this lesson is for students to use their knowledge of base-ten diagrams to make sense of two written addition algorithms.

In a previous lesson, students revisited addition within 1,000 using strategies based on place value, and properties of operations. An **algorithm** is different from a strategy because it is a set of steps that works every time as long as the steps are carried out correctly. The algorithms introduced in this lesson draw on the grade 2 work within 1,000 in that they show the addition of ones to ones, tens to tens, and hundreds to hundreds. Students should have access to base-ten blocks if they choose to use them.

Access for:

Students with Disabilities

- Engagement (Activity 2)

English Learners

- MLR7 (Activity 1)

Instructional Routines

MLR3 Clarify, Critique, Correct (Activity 2), Which One Doesn't Belong? (Warm-up)

Materials to Gather

- Base-ten blocks: Activity 1, Activity 2

Lesson Timeline

Warm-up	10 min
Activity 1	20 min

Teacher Reflection Question

In grade 2, students spent significant time working with place value. How did students' work with place value prepare them for the

Activity 2	15 min	move to using algorithms to add?
Lesson Synthesis	10 min	
Cool-down	5 min	

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

🕒 5 min

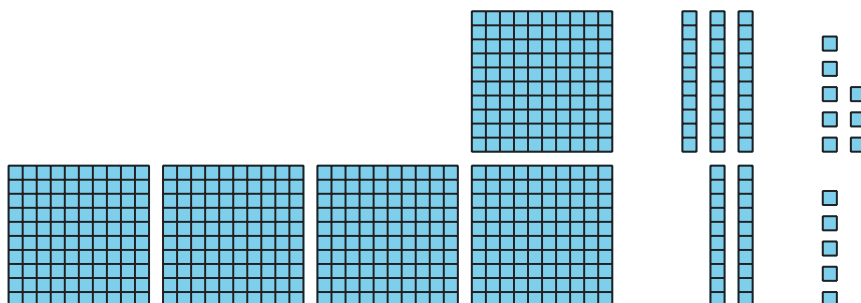
Choose an Algorithm

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Student-facing Task Statement

A diagram of the base-ten blocks that represent $138 + 425$ is shown.



Use an algorithm you learned in today's lesson to find the value of the sum.

Student Responses

563 or $500 + 50 + 13$. Students can use either algorithm from the lesson.