# Lesson 4: Introduction to Addition Algorithms

### Standards Alignments

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| --- | --- |
| 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

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| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 20 min |
| Activity 2 | 15 min |
| Lesson Synthesis | 10 min |
| Cool-down | 5 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 move to using algorithms to add?

## Cool-down

(to be completed at the end of the lesson) 5min

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.