Lesson 3: Factors as a Factor in Our Strategy Choice

Standards Alignments

Addressing   5.NBT.B.5

Teacher-facing Learning Goals

- Fluently multiply multi-digit whole numbers using the standard algorithm.

Student-facing Learning Goals

- Let's reason about strategies we use to multiply.

Lesson Purpose

The purpose of this lesson is for students to reason about how the factors in a problem can influence the strategy they use to find the product, in particular identifying cases where the standard algorithm would be useful.

In previous units, students learned to use the standard algorithm to multiply multi-digit numbers and practiced using it in prior lessons. In this lesson, students reason about how the factors in a problem can influence the multiplication strategy they use. They recognize that the standard algorithm can be more useful in some cases than others. Each activity launches with an opportunity for students to review the problems before solving and the syntheses focus on student reasoning about their choices. It is important to note that there is not one correct strategy for each problem. If students need additional support with the concepts in this lesson, refer back to Unit 4, Section A in the curriculum materials.

Access for:

♿ Students with Disabilities

- Action and Expression (Activity 2)

🌐 English Learners

- MLR7 (Activity 1)

Instructional Routines

Number Talk (Warm-up)

Lesson Timeline

Warm-up	10 min
Activity 1	20 min
Activity 2	15 min

Teacher Reflection Question

Through teaching, we have the opportunity to learn about our own understandings as well as those of the students. What is one thing you learned today about your own understandings

Lesson Synthesis	10 min
Cool-down	5 min

and what is one thing you learned about the students?

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

Reflect on Multiplication

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Student-facing Task Statement

Describe something new, interesting, or challenging you learned today about multiplication.

Student Responses

Sample responses: I learned a new strategy. It was interesting to use the factors to choose my strategy. The algorithm was helpful as the size of the factor increased.