# Lesson 8: Multiplication Fluency

### Standards Alignments

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| --- | --- |
| Addressing | 5.NBT.B.5, 5.NF.B.4 |

### Teacher-facing Learning Goals

* Solve problems that involve the multiplication of multi-digit numbers.

### Student-facing Learning Goals

* Let’s practice multiplication.

### Lesson Purpose

The purpose of this lesson is for students to play games to continue to develop fluency with multiplying multi-digit numbers with the standard algorithm.

In this lesson, students continue to find products of a 2-digit number and a 3-digit number with a strategic goal. They continue to play  Greatest Product and they also use 5 given digits to try to make a product that is as close as possible to a given number. This is more challenging than making the greatest product as rather than putting the largest digits in the largest place values students will need to experiment or reflect about how each digit in the numbers influences the value of the product. This lesson provides an opportunity for teachers to observe students as they use the standard algorithm and offer support, as needed.

### Access for:

###  Students with Disabilities

* Action and Expression (Activity 2)

### Instructional Routines

Number Talk (Warm-up)

### Materials to Gather

* Materials from a previous lesson: Activity 1
* Materials from previous centers: Activity 1

### 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

Reflect on a time your thinking changed about something in class recently. How will you alter your teaching practice to incorporate your new understanding?

## Cool-down

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

Multiplication Reflection

### Standards Alignments

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| --- | --- |
| Addressing | 5.NBT.B.5 |

### Student-facing Task Statement

Describe something you really understand well from this section on multiplying multi-digit numbers, or describe something that was confusing or challenging.

### Student Responses

Sample response: I like using the standard algorithm because it’s faster than writing all the partial products. I have to remember to estimate to check to make sure my answer makes sense.