# Lesson 16: Multiply Numbers Larger than 20

### Standards Alignments

|  |  |
| --- | --- |
| Building On | 3.OA.B.5 |
| Addressing | 3.OA.B.5 |
| Building Towards | 3.OA.C.7 |

### Teacher-facing Learning Goals

* Multiply within 100, where one factor is greater than 20.
* Use properties based on place value and properties of operations to multiply.

### Student-facing Learning Goals

* Let’s multiply numbers that are larger than 20.

### Lesson Purpose

The purpose of this lesson is for students to multiply within 100, where one factor is greater than 20.

Previously, students have used strategies based on place value and properties of operations to find products of a whole-number and a teen number. Here, students extend this work to larger two-digit numbers. Students first analyze different strategies and then apply one or more of them to find the value of other products. The lesson also includes an optional game students can play to apply what they’ve learned to multiply larger numbers.

### Access for:

###  Students with Disabilities

* Engagement (Activity 3)

###  English Learners

* MLR8 (Activity 1)

### Instructional Routines

Number Talk (Warm-up)

### Materials to Gather

* Base-ten blocks: Activity 1, Activity 2

### Materials to Copy

* Centimeter Grid Paper - Standard (groups of 2): Activity 1
* Centimeter Grid Paper - Standard (groups of 2): Activity 2
* Number Cards (0-10) (groups of 2): Activity 3

### Lesson Timeline

|  |  |
| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 15 min |
| Activity 2 | 15 min |
| Activity 3 | 10 min |
| Lesson Synthesis | 5 min |
| Cool-down | 5 min |

### Teacher Reflection Question

When do your students feel successful in math? How do you know?

## Cool-down

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

Multiply Numbers Greater than 20

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 3.OA.B.5 |

### Student-facing Task Statement

What’s the value of $4×24$? Explain or show your reasoning.

### Student Responses

96. Sample response: $4×20=80$, $4×4=16$, $80+16=96$