

# Lesson 11: Estrategias de multiplicación para rectángulos sin cuadrícula

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 3.MD.C.7.c, 3.OA.C.7 |

### Teacher-facing Learning Goals

* Apply associative and distributive properties of multiplication to find products within 100.
* Recognize that multiplication is associative and can be distributed over addition.

### Student-facing Learning Goals

* Usemos diferentes estrategias para encontrar el área de rectángulos sin cuadrícula.

### Lesson Purpose

The purpose of this lesson is for students to represent multiplication strategies on an ungridded rectangle.

Previously, students used gridded rectangles to represent strategies based on the distributive and associative properties. Here, they use the same strategies, but represent them on an area diagram without a grid. Then, students match expressions that could represent the area of the same rectangle, without using diagrams. The reasoning helps students work toward fluent multiplication within 100.

This lesson has a Student Section Summary.

### Access for:

### Students with Disabilities

* Engagement (Activity 2)

### English Learners

* MLR2 (Activity 1)

### Instructional Routines

Card Sort (Activity 2), Which One Doesn’t Belong? (Warm-up)

### Materials to Copy

* Card Sort: Different Expressions, Same Rectangle (groups of 2): Activity 2
* Centimeter Grid Paper - Standard (groups of 2): Activity 2

### Lesson Timeline

|  |  |
| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 15 min |
| Activity 2 | 20 min |
| Lesson Synthesis | 10 min |
| Cool-down | 5 min |

### Teacher Reflection Question

Which students came up with an unexpected strategy in today’s lesson? What are some ways you can be more open to the ideas of each and every student?

## Cool-down

(to be completed at the end of the lesson)

5min

Expresiones para un rectángulo

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 3.OA.C.7 |

### Student-facing Task Statement

1. Marca o colorea este rectángulo para mostrar una estrategia que ayude a encontrar su área.
2. Escribe una o más expresiones que representen cómo encuentras el área.



### Student Responses

1. Sample response:
2. $(6×5)+(6×4)$

