

Lesson 2: Productos parciales en diagramas

Standards Alignments

Addressing 5.NBT.B Building Towards 5.NBT.B.5

Teacher-facing Learning Goals

- Interpret partial products diagrams.
- Multiply a three-digit number and a twodigit number.

Student-facing Learning Goals

 Interpretemos diagramas que nos pueden ayudar a encontrar productos.

Lesson Purpose

The purpose of this lesson is for students to multiply multi-digit whole numbers using strategies based on place value and the properties of operations.

This lesson builds on the partial products representation students saw in grade 4 to help organize calculations of whole number products. This becomes even more important for the product of a two-digit and three-digit number as the number of partial products is larger, depending on the diagram that is used. Part of the value of the standard algorithm which students will also see in later lessons is that it condenses the calculations and the number of partial products.

Access for:

Students with Disabilities

• Engagement (Activity 2)

3 English Learners

MLR8 (Activity 1)

Instructional Routines

Which One Doesn't Belong? (Warm-up)

Lesson Timeline

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

Teacher Reflection Question

Think about which students haven't shared their strategies in class lately. Were there missed opportunities to highlight their thinking during recent lessons? How can you take advantage of those opportunities when they arise?



Cool-down 5 min

$\begin{cases} \textbf{Cool-down} \end{cases} \begin{cases} \textbf{(to be completed at the end of the lesson)} \end{cases}$

© 5 min

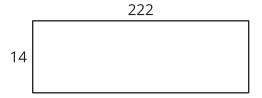
 222×14

Standards Alignments

Building Towards 5.NBT.B.5

Student-facing Task Statement

Este es un diagrama que representa 222×14 .



Encuentra el valor de 222×14 . Usa el diagrama si te ayuda. Explica o muestra tu razonamiento.

Student Responses

3,108. Sample response: I broke 222 down into hundreds, tens, and ones, and multiplied each by 14.

	200	20	2
14	2,800	280	28

The product is 2,800 + 280 + 28, which is 3,108.