# Lesson 11: Different Partial Quotients

## Standards Alignments

Addressing      5.NBT.B.6, 5.OA.A.2

## Teacher-facing Learning Goals

- Divide multi-digit whole numbers using place value understanding and the relationship between multiplication and division.

## Student-facing Learning Goals

- Let's use what we know about multiplication and place value to find quotients.

## Lesson Purpose

The purpose of this lesson is for students to use the relationship between multiplication and division and place value understanding to divide multi-digit numbers.

In the previous lesson, students found quotients in a way that makes sense to them. In this lesson, students consider notation to record a partial quotients strategy, which they have used with one-digit divisors in a prior course. Students use the notation to record how dividends can be decomposed in different ways to make different partial quotients. Students consider more efficient ways to make partial quotients based on place value understanding and calculations they are able to do mentally.

## Access for:

### ⦿ Students with Disabilities

- Action and Expression (Activity 1)

## Instructional Routines

MLR2 Collect and Display (Activity 1), Notice and Wonder (Warm-up)

## Materials to Copy

- Partial Quotient Expressions (groups of 2): Activity 1

## Lesson Timeline

| | |
|---|---|
| Warm-up | 10 min |

## Teacher Reflection Question

Reflect on how comfortable your students are asking questions of you and of each other. What

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

can you do to encourage students to ask questions?

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

Find the Value

## Standards Alignments

Addressing    5.NBT.B.6

## Student-facing Task Statement

Find the value of $465 \div 15$. Explain or show your reasoning.

## Student Responses

31. Sample responses:

- $30 \times 15 = 450, 1 \times 15 = 15, 450 + 15 = 465$
- $450 \div 15 = 30$ and $15 \div 15 = 1$ and $30 + 1 = 31$