## $4^{\text {th }}$ Grade Unit 3: Reasoning about Multiplication and Division



## Overview:

Previously students were multiplying and dividing numbers within 100. In this unit students will be building on this understanding by multiplying multi-digit numbers by a one-digit number or two two-digit numbers as well as dividing four-digit numbers with one-digit divisors. This unit also incorporates problem solving with money, intervals of time, and metric measurements for liquid volume, distance, and weight.

## Learning Targets:

In Unit 3, students will:

- solve multi-step problems.
- solve problems involving multiplicative comparison.
- use estimation to solve multiplication and division problems.
- solve problems involving elapsed time.
- solve problems involving metric measurement including volume, distance, and weight.

Key Vocabulary: (linked to GA DOE Interactive Glossary)

| Additive Comparison | Analog Clock | Dividend | Elapsed Time | Factor |
| :--- | :--- | :--- | :--- | :--- |
| Grams | Kilograms | Liters | Milliliters | Multiplicative Comparison |
| Product | Remainder | Quotient | Multiply | Divide |

## Supporting Resources:

http://ctlslearn.cobbkl2.org/<br>https://gavirtual.instructure.com/courses/34725\#modules<br>Metric System Basics<br>Partial Products for Multiplication and the Distributive Property<br>Area Model and Algorithm Multiplication<br>Multiplicative Comparison<br>Area Model for Multiplication<br>Partial Quotient Division

