



STRATEGIC COMPETENCE: BALANCING THE HOW, WHY, AND WHEN.

4th 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:

Metric System Basics

http://ctlslearn.cobbk12.org/ Area Model and Algorithm Multiplication

https://gavirtual.instructure.com/courses/34725#modules **Multiplicative Comparison**

Partial Quotient Division

Partial Products for Multiplication and the Distributive Property



Area Model for Multiplication