## $3^{\text {rd }}$ Grade Unit 3: <br> Relating Multiplication to Division



## Overview:

In this unit, students will learn that multiplication and division are inverse operations that can be used to solve problems involving equal groups, arrays, and area measurements. Students discover that numbers of objects can be divided by partitioning them into equal shares (partitive) and by grouping them into groups of a known size (quotative).

## Learning Targets:

In Unit 3, students will:

- use multiple strategies and representations to model division expressions
- relate multiplication to division.
- use place value understanding to multiply single digit factors by multiples of 10 .
- solve multiplication and division problems with unknown factors in all positions.
- gain fluency with multiplication and division facts
- Integrate contexts involving mass and liquid volume

Key Vocabulary: (linked to GA DOE Interactive Glossary)

| Array | Associative Property | Bar Model | Column | Commutative Property |
| :--- | :--- | :--- | :--- | :--- |
| Distributive Property | Equal Groups | Equation | Expression | Factor |
| ldentity Property | Multiple | Product | Repeated Addition | Row |
| Scale | Tape Diagram | Zero Property | Pictograph | Bar Graph |
| Liquid Volume | Mass | Ounce | Pound | Cup |

## Supporting Resources:

http://ctlslearn.cobbk12.org/
https://gavirtual.instructure.com/courses/34724\#modules
1.3: Multiplication and Division of Whole Numbers - Mathematics

LibreTexts

Relate Multiplication to Division - Study Jams
https://www.geogebra.org/m/av6psbf7\#material//vtgbdv8
https://www.multiplication.com/games/division-games

