

# Unit 2a-Fluently Multiply And Divide Within 100

Content Area: **Mathematics**  
Course(s): **Math 3**  
Time Period: **Marking Period 2**  
Length: **MP2 Topic 5 5-1 to 5-8**  
Status: **Published**

## Essential Questions

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- What are strategies to solve multiplication and division facts?

## Big Ideas

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- **Multiplication Tables-** Students will use multiplication tables to find patterns and see division as an unknown factor problem.
- **Use Strategies-** Students will use strategies, including use of multiplication tables, breaking apart, and skip counting.
- **Problems and Patterns-** Represent and solve problems involving multiplication and division, with a focus on identifying and explaining patterns in arithmetic.
- **Connect Stories and Equations-** Students will analyze the relationships between the quantities in word problems and connect relationships to the numbers and operations in the corresponding equations

## Cross-Curricular Integration

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**Integration Area: Social Studies**

6.1.5.EconET.1: Identify positive and negative incentives that influence the decisions people make.

Activity:

Students will create a budget for a Thanksgiving meal using a store circular. Students will multiply and add their food together to see if they can stay under budget, while getting all of the food they want.

## CSDT Technology Connection

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8.1.5.AP.4: Break down problems into smaller, manageable sub-problems to facilitate program development.

## **Enduring Understandings**

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### **Operations and Algebraic Thinking**

**3.OA.C [M]** Multiply and divide within 100

**3.OA.A.1** interpret products of whole numbers, e.g., interpret  $5 \times 7$  as the total number of objects in 5 groups of 7 objects each.

**3.OA.A.2** Interpret whole-number quotients of whole numbers, e.g., interpret  $56 \div 8$  as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.

**3.OA.A.3** Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

**3.OA.C.7** Fluently multiply and divide within 100 using strategies such as the relationship between multiplication and division (knowing that  $8 \times 4 = 40$ , one knows  $40$  divided by  $5 = 8$ ) for properties of operation.

**3.OA.D.9** Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends

## **Mathematical Practices Focus**

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7. Look for and make use of structure.