Unit 5: Chapter 5 Use Multiplication Facts

Content Area: **Mathematics**
Course(s): **Math 3**
Time Period: **December**
Length: **3 weeks**
Status: **Published**

Unit Summary

Students will extend their multiplication skills to gain conceptual understanding of multiplying within 100. They will use previously learned techniques to solve more complex problems, such as finding unknown factors, and lay the groundwork for understanding division. They will explore multiplication with multiples of ten.

Standards

MA.3.OA.A.4	Determine the unknown whole number in a multiplication or division equation relating three whole numbers.
MA.3.OA.D.9	Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.
MA.3.NBT.A.3	Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.
TECH.8.1.5	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

Student Learning Objectives

Students will learn to:

- identify and describe a number pattern shown in a function table.
- use an array or a multiplication table to find an unknown factor.
- solve multiplication problems by using the strategy draw a diagram.
- use base-ten blocks, a number line, or place value to multiply with multiples of ten.
- model and record multiplication with multiples of 10.

Essential Questions

How can you use multiplication facts, place value, and properties to solve multiplication problems?

Enduring Understandings

Students will understand that:

- multiplication facts can be used to solve word problems.
- understanding place value helps to compare numbers.
- knowing multiplication properties helps to solve multiplication problems.

Application

Students will be able to independently use their learning to:

- determine how patterns and multiplication are related.
- determine how multiplication properties can help to find products.

Skills

Students will be skilled at:

- identifing examples of the Distributive Property.
- finding an unknown factor or product.
- solving a multiplication problem using patterns.
- describing and complete patterns in tables.