

Unit 3 - Chapter 3: Multiply 2-Digit Numbers

Content Area: **Mathematics**
Course(s): **Math 4**
Time Period: **October**
Length: **2 weeks**
Status: **Published**

Unit Summary

In this unit, we will be developing understanding and fluency with multi-digit multiplication. Students will understand how to multiply double digit numbers and can use a variety of strategies to find their products including partial products, regrouping, and drawing area models.

Standards

MA.4.OA.A.3	Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
MA.4.NBT.A.1	Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.
MA.4.NBT.A.3	Use place value understanding to round multi-digit whole numbers to any place.
MA.4.NBT.B.5	Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
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.
TECH.8.1.5.A.CS1	Understand and use technology systems

Student Learning Objectives

Students will learn to:

- use place value and multiplication properties to multiply by tens.
- estimate products by rounding or by using compatible numbers.
- use area models and partials products to multiply 2-digit numbers.
- use place value and partial products to multiply 2-digit numbers.
- use regrouping to multiply 2-digit numbers.
- choose a method to multiply 2-digit numbers.
- use the strategy *draw a diagram* to solve multi step multiplication problems

Essential Questions

- What strategies can you use to multiply by tens?
- What strategies can you use to estimate products?
- How can you use area models and partial products to multiply 2-digit numbers?
- How can you use place value and partial products to multiply 2-digit numbers?
- How can you use regrouping to multiply 2-digit numbers?
- How can you find and record products of two 2-digit numbers?
- How can you use the strategy *draw a diagram* to solve multi-step multiplication problems?

Enduring Understandings

Students understand that:

- place value is needed to multiply.
- there are different strategies to solve problems.

Application

Students will be able to independently use their learning to:

- multiply multi-digit numbers using a variety of methods.

Skills

Students will be skilled at:

- multiplying multi-digit numbers using a variety of methods.