# Unit 1c-Use Strategies And Properties To Multiply By 1- Digit Numbers

Content Area: **Math**
Course(s): **Math 4**
Time Period: **Marking Period 1**
Length: **MP1 Topic 3 3-1 to 3-8**
Status: **Published**

## Essential Questions

- How can you multiply by multiples of 10, 100, and 1,000?
- How can you multiply whole numbers?

## Big Ideas

- **Estimation:** Students will multiply multiples of 10, 100, and 1,000 by 1-digit numbers to estimate. Students will use estimation to check the reasonableness of answers.
- **Distributive Property:** Students will apply the Distributive Property throughout the topic as they use partial products to find the product of a t-digit number and a multi-digit number.
- **Problem Solving:** Students will apply strategies for whole-number multiplication to solve real-world problems.

## CRLLKS- Career Education

9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.

9.2.5.CAP.3: Identify qualifications needed to pursue traditional and non-traditional careers and occupations.

9.2.5.CAP.4: Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements.

**Connection:**
Use real world mathematical problems involving perimeter and/or area. Include job roles such as architects, construction workers, etc. to solve perimeter and/or area word/story problems.

## CSDT Technology Connection

8.1.5.AP.1 Compare and refine multiple algorithms for the same task and determine which is the most

appropriate.

## Enduring Understandings

**Operations and Algebraic Thinking**

4.OA.A.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

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. Students may obtain data and information to describe that energy and fuels are derived from natural resources and their uses affect the climate and solve multistep word problems based on the data collected.

**Number and Operations in Base Ten**

4.NBT.B.5 [M] 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.

## Mathematical Practices Focus

4. Model with mathematics.