# Unit 2d-Factors and Multiples 

Content Area: Math<br>Course(s): Math 4<br>Time Period: Marking Period 2<br>Length:<br>Status:<br>MP2 Topic 7 7-1 to 7-3<br>Published

## Essential Questions

- How can you use arrays or multiplication to find the factors of a number?
- How can you identify prime and composite numbers?
- How can you find multiples of a number?


## Big Ideas

- Factors and Factor Pairs: Students find factors and factor pairs for a given number.
- Prime and Composite Numbers: Students classify whole numbers greater than 1 as either prime or composite.
- Relationships Between Factors and Multiples: Students come to understand that a whole number is a multiple of each of its factors.
- Factors and Equivalent Fractions: Students will work to find factor pairs which will lay the foundation for generating an equivalent fraction by dividing the numerator and denominator by a common factor greater than 1 .


## 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.B. 4 [M] Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range $1-100$ is a multiple of a given one-digit number. Determine whether a given whole number in the range $1-100$ is prime or composite.

Number and Operations in Base Ten
4.NBT.B. 5 Multiply a whole number of up to four digits by a one-digit whole number, (and multiply two twodigit 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

8. Look for and express regularity in repeated reasoning
