Unit 2d-Factors and Multiples

Content Area: **Math**
Course(s): **Math 4**
Time Period: **Marking Period 2**
Length: **MP2 Topic 7 7-1 to 7-3**
Status: **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.

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.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 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

8. Look for and express regularity in repeated reasoning