

Lesson 7: Find Factors and Multiples

Standards Alignments

Building On 3.OA.B.5, 3.OA.C.7

Addressing 4.OA.B.4

Teacher-facing Learning Goals

- Determine whether a number from 1–100 is a multiple of another number.
- Find all factor pairs of a given whole number from 1–100.

Student-facing Learning Goals

- Let's find factors and multiples of whole numbers from 1–100.

Lesson Purpose

The purpose of this lesson is for students to find factors and multiples of a given whole number from 1–100.

In previous lessons, students learned about factor pairs, multiples, and prime and composite numbers.

The purpose of this lesson is for students to use the language of factors and multiples to describe numbers within 100. Students look for all factors of numbers and decide whether a given number is prime or composite. Students are encouraged to find patterns in composite numbers which help to identify a factor. For example, if the last digit of a number is 0 then 2, 5, and 10 are all factors of that number.

This lesson has a Student Section Summary.

Access for:

Students with Disabilities

- Engagement (Activity 2)

English Learners

- MLR8 (Activity 1)

Instructional Routines

Number Talk (Warm-up)

Materials to Gather

- Centimeter cubes: Activity 2

Materials to Copy

- Find the Number Stage 2 Directions and

Lesson Timeline

Warm-up	10 min
Activity 1	15 min
Activity 2	20 min
Lesson Synthesis	10 min
Cool-down	5 min

Teacher Reflection Question

As you finish up this section, reflect on the norms and activities that have supported each student in learning math. How have you seen each student grow as a young mathematician throughout this work? How have you seen yourself grow as a teacher?

Cool-down (to be completed at the end of the lesson)

 5 min

Complete the Statements

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Student-facing Task Statement

Complete the statements for each number.

number	factor	multiple
11	_____ is a factor of _____ because ...	_____ is a multiple of _____ because ...
24	_____ is a factor of _____ because ...	_____ is a multiple of _____ because ...

Student Responses

Sample responses:

number	factor	multiple
11	11 is a factor of 55 because $11 \times 5 = 55$.	11 is a multiple of 1 because $11 \times 1 = 11$.
24	8 is a factor of 24 because $8 \times 3 = 24$.	24 is a multiple of 8 because $8 \times 3 = 24$.