

Lesson 12: Solve Problems Involving Multiplication

Standards Alignments

Addressing 4.MD.A.2, 4.NBT.B.5, 4.OA.A.3

Building Towards 4.OA.A.3

Teacher-facing Learning Goals

- Multiply multi-digit numbers using strategies based on place value and the properties of operations.

Student-facing Learning Goals

- Let's solve problems using what we learned about multiplication of whole numbers.

Lesson Purpose

The purpose of this lesson is for students to solve contextual problems that involve multiplication of a single-digit number and a whole number of up to four digits, or multiplication of 2 two-digit numbers.

This lesson gives students the opportunity to apply the multiplication strategies they have learned to solve various contextual problems involving measurement. The problems vary in format and complexity—some involve a single computation and others require multiple steps to solve. The work here prompts students to make sense of problems and persevere in solving them (MP1) and to reason quantitatively and abstractly (MP2).

This lesson has a Student Section Summary.

Access for:

Students with Disabilities

- Action and Expression (Activity 1)

Instructional Routines

MLR7 Compare and Connect (Activity 1), What Do You Know About ____? (Warm-up)

Materials to Gather

- Tools for creating a visual display: Activity 1

Lesson Timeline

Warm-up	10 min
Activity 1	25 min
Activity 2	10 min
Lesson Synthesis	10 min
Cool-down	5 min

Teacher Reflection Question

As students shared their ideas today, how did you ensure all students' voices were heard and valued as an important part of the collective learning?

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

 5 min

Leap Year

Standards Alignments

Addressing 4.MD.A.2, 4.NBT.B.5, 4.OA.A.3

Student-facing Task Statement

In a leap year, the month of February has 29 days. How many hours are in that month? Show your reasoning.

Student Responses

696 hours. Sample response:

$$\begin{array}{r}
 29 \\
 \times 24 \\
 \hline
 116 \\
 580 \\
 \hline
 696 \\
 + 400 \\
 \hline
 1096
 \end{array}$$