Lesson 18: Represent Arrays with Expressions

Standards Alignments

Addressing   3.OA.A.1

Teacher-facing Learning Goals

- Represent multiplication situations with arrays and multiplication expressions.

Student-facing Learning Goals

- Let's represent situations with arrays and expressions.

Lesson Purpose

The purpose of this lesson is for students to represent multiplication situations with arrays and multiplication expressions.

In a previous lesson, students arranged objects into arrays and described the arrays in terms of equal groups. In this lesson, students write expressions to represent arrays to further connect arrays and multiplication (MP2).

As students connect arrays to expressions, they may write 3×5 or 5×3 to represent 3 rows of 5 chairs. This is fine as long as students can correctly describe where the "3 rows of 5 chairs" are in their array or expression. Keep collecting ideas that arise about commutativity.

Access for:

♿ Students with Disabilities

- Representation (Activity 1)

🌐 English Learners

- MLR2 (Activity 1)

Instructional Routines

How Many Do You See? (Warm-up)

Materials to Gather

- Connecting cubes or counters: Activity 1

Lesson Timeline

Warm-up	10 min

Teacher Reflection Question

In an upcoming lesson, students will learn about the commutative property of multiplication. What do you notice in their work from today's

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

lesson that you might leverage in that future lesson?

Cool-down (to be completed at the end of the lesson)   🕐 5 min

Array Situation

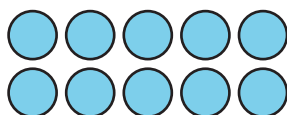## Standards Alignments

Addressing   3.OA.A.1

Student-facing Task Statement

There are 2 rows of plants. Each row has 5 plants.

1. Draw an array to represent the situation.
2. Write an expression to represent the situation.

Student Responses

1. Sample response:

2. 2×5 or 5×2