

Lesson 8: Count Columns and Objects in Columns

Standards Alignments

Addressing 2.OA.B.2, 2.OA.C.3, 2.OA.C.4

Teacher-facing Learning Goals

- Describe an array as an arrangement of objects into columns with an equal number of objects in each column.

Student-facing Learning Goals

- Let's learn about columns in arrays.

Lesson Purpose

The purpose of this lesson is for students to see that in an array of objects, the objects are arranged into columns with an equal number of objects in each column.

In the previous lesson, students learned that an array is an arrangement of objects into rows with an equal number of objects in each row.

In this lesson, students refine their understanding of an array to include the fact that the objects in a row are equally spaced from each other. When arranged this way, the objects also line up into columns. Students use mathematical language to describe arrays and recognize that rows go side to side and columns go up and down (MP6). They use the structure of the array to find the total number of objects in an array (MP7).

Students should have access to counters throughout the lesson, including during the cool-down.

Access for:

Students with Disabilities

- Representation (Activity 1)

Instructional Routines

Estimation Exploration (Warm-up), MLR8 Discussion Supports (Activity 1)

Materials to Gather

- Counters: Activity 1, Activity 2

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

Outside of class, how can you reinforce the array work done today? Are there opportunities at other times during the day to ask students to represent or count objects using an array?

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

 5 min

Make Rows and Columns

Standards Alignments

Addressing 2.OA.C.4

Student-facing Task Statement

1. Show an array with 4 rows and 2 objects in each row.
2. How many columns are there? How many objects are in each column?
3. How many objects are there in all?

Student Responses

1. Students show an array with 2 columns and 4 rows.
2. 2 columns with 4 in each
3. 8 objects in all