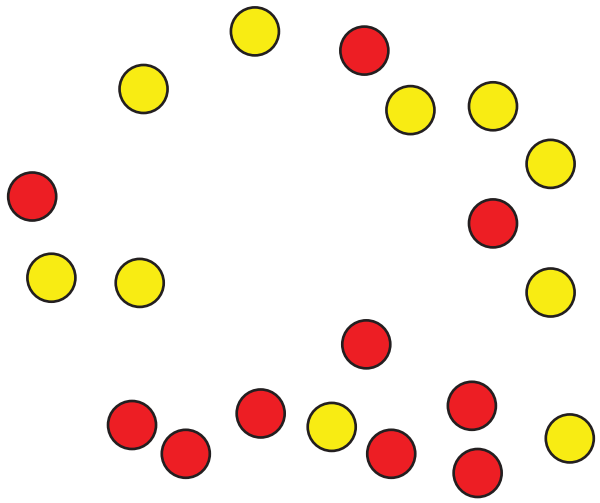
Count Columns and Objects in Columns

Let's learn about columns in arrays.

Warm-up

Estimation Exploration: Rearrange the Dots

How many counters do you see?



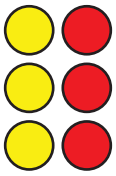
Record an estimate that is:

too low	about right	too high

Activity 1

Count by Columns

1.



a. How many columns are in this array?

b. How many counters are in each column?

c. How many counters are there in all?

2.



a. How many columns are in this array?

b. How many counters are in each column?

c. How many counters are there in all?

3. Use 10 counters. Make 2 columns with the same number in each column.

   a. How many counters are in each column?

   b. How many rows are in the array?

   c. How can you count these counters without counting by ones?

4. Use 15 counters. Make 3 columns with the same number in each column.

   a. How many counters are in each column?

   b. How many rows are in the array?

   c. How many counters are in each row?

   d. How can you count these counters without counting by ones?

Activity 2

Guess My Array

Four students make arrays.

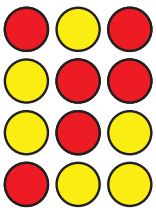
- Han says, “My array has an even number of counters. It has 2 rows with 6 counters in each row.”
- Priya says, “My array has more than 10 counters. It has 4 rows with 3 counters in each row.”
- Elena says, “My array is very long. It has 6 counters in each column.”
- Kiran says, “My array has more columns than rows. It has 3 rows.”

1. Write the name of each student below their array.

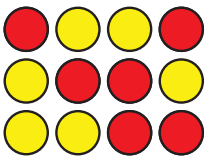
A



B



C



D



2. Each student used _____ counters to make an array.

3. Make an array using up to 25 counters. Don't let your partner see.

   Give your partner clues so they can try to make your array. Compare your arrays.

   How do you know the total number of counters in each array? Be prepared to explain your reasoning.