

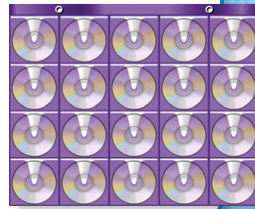
Arrays and Multiplication

How does an array show multiplication?

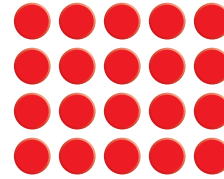
Dana keeps her entire CD collection in a holder on the wall. The holder has 4 rows. Each row holds 5 CDs. How many CDs are in Dana's collection?

The CDs are in an array. An **array** shows objects in equal rows.

Hands-On
counters



The counters show 4 rows of 5 CDs.



Each row is a group. You can use addition to put together equal groups.

$$5 + 5 + 5 + 5 = 20$$

Multiplication can also be used to find the total in an array.

What You Say 4 times 5 equals 20

What You Write $4 \times 5 = 20$

number of rows

number in each row

There are 20 CDs in Dana's collection.

- How does an array show equal groups?

- Why do you add 5 four times?
- How would the addition sentence change if the array had another row?

- How would the array look if the multiplication sentence for it was $5 \times 4 = 20$?