

Today's Lesson: To recognize multiplication as repeated addition of equal groups used in arrays and comparisons.

CCSS

Operations and Algebraic Thinking, Third Grade. (Interpret a multiplication equation as a comparison. Represent verbal statements of multiplicative comparisons as multiplication equations.) 4.OA.1

**Focus Lesson 1
(I do)**

"We have learned that we can solve some problems by using addition. Today we are going to learn how to use multiplication to solve problems."

Begin the lesson by giving students the following scenario.

"I used cubes to build a wall, 5 cubes wide and 3 cubes high. I want to find out how many blocks I used."

The teacher will hold up cubes to show what the 'wall' looks like. The teacher will think aloud and say, *"First I will count the first row . . . I have 5 cubes. Next I count the second row . . . I have 5 cubes. Finally I count the third row . . . I have 5 cubes. I know that $5+5+5=15$."*

Still thinking aloud, the teacher will say, *"I am going to see what happens if I add another row of 5 cubes wide."* The teacher will then add another row of cubes. *"I added another row of 5 cubes. I know that to find out how many cubes I have, I need to add 5 more onto the 15. $15+5=20$."* The teacher will think aloud and write on the white board (or chart paper), *"I know that I added the same number of blocks for each row. I know that now I have 4 rows of 5 cubes each."*

The teacher will then explain, while writing on the board, 4×5 is the same as $5+5+5+5$.

Teach students the new vocabulary: **array**

The teacher will demonstrate how to color in an 'array' sheet to show the same rows and columns.

Round of Daily 3 Math

**Focus Lesson 2
(We do)**

The teacher needs to hand out cubes to pairs of students. Each pair will get 3 sets of 10 cubes each (30 cubes).

The teacher will say, "We are going to practice counting blocks by using addition and multiplication. I am going to tell you how many rows . . . and how many cubes in each row. One of you will build it. Then, your partner will say the addition sentence and the multiplication sentence for each problem. When we go on to the next problem, you will switch jobs."

Example: The teacher will say she would like to see 3 rows, with 7 cubes in each row. One student will build this with their cubes. The other student in the partnership will say, *" $7+7+7=21$ and $7 \times 3=21$ "*



Round of Daily 3 Math

Focus Lesson 3 (You do)

Give each child a paper filled with rows and columns. (A sheet for arrays.) Have the students work on the back of the paper first. Explain to the students that they are going to draw a picture, then color in the rows and columns according to the following story problem:

“Miley saw 3 groups of 4 butterflies. Draw a picture on the back of your paper to show 3 groups of 4 butterflies. Next, color in the array to show 3 groups of 4.”

After students are finished, have them talk to an elbow buddy. The students need to explain to each other their picture and their array. Each pair should be able to say/write the addition and multiplication sentence for the problem.

*If extra time, practice again using another story problem.

Student Sharing

