Lesson Plan July 16th, 2019

Array Models in Multiplication

Third Grade Math 25 minutes Standard: 3.OA.A.1

Key Learning Objectives

Students will be able to understand the basic concept of multiplication and solve multiplication equations using array models. Students will interpret products of whole numbers, e.g. 5x7 as the whole number of objects in 5 groups of 7 objects each.

Materials

* Whiteboard & markers (teacher)
* Blue Blocks for each student
* Array worksheets

Introduction

* Explain what an array is and what it’s used for.
* Give an example of a multiplication word problem that can be solved using array models.
* Garden example.

Teacher Modeling

* Draw an array with 2 by 3 cubes and show it to the class.
* Ask students to identify how many rows, along with how many cubes in each row.
* Question students on total number.
* Multiplying rows by columns is the quickest way to find the answer. (2x3) = 6.

Guided Practice

* All together with manipulatives (blocks)
* 2 by 4
* Discuss process

1. What multiplication equation can I write for this array?
2. How do you know?
3. What is the product of 2x4?
4. Does 3x2 give the same answer? Show me with blocks 4x2

* Two more examples:
* 3x3
* 4x4
* 4x3 \*\*Informal Assessment #1\*\* (Teacher walk around to check for correct array)

Break into Tiered Groups

* Tier 1- Individual or with group
* Tier 2- With group
* Tier 3- With me
* Each group should use blocks to make array, draw the array on worksheet, then solve equation and find the product.

\*\*Extra worksheet if students finish early\*\*

Assessment

* Draw an array of hearts showing 6x3 on the board.
* Students must write and solve the equation. \*\*Formal Assessment\*\*
* Flip the paper over and tell me:

1. Why is it important to know HOW to multiply?
2. When might you use this skill in the real world?

Collect all worksheets and assessments

Review and Closing

* Tell students to turn and talk with their partner about the following:
* “How can we use arrays to solve multiplication problems?
* “Why is it important to know how to multiply?”
* “When might you use this skill in the real world?”

Summative Assessment at end of unit- Test