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.

Introduction

* Give an example of a multiplication word problem that can be solved using array models.
* EXAMPLE HERE
* “Today you are going to learn about multiplication as well as how to solve multiplication equations using array models.
* “An array is arranging objects in rows, with the same number of objects in each row.”

Teacher Modeling

* Count out 5 rows of 4 cubes and show them to class.
* Ask students to identify how many rows, along with how many cubes in each row.
* “Any idea how to figure out the total number of cubes in this array?”
* Let students think about it
* Multiplying rows by columns is the quickest way to find the answer. (5x4) = 20.
* “The answer to a multiplication problem is called the product.”

Guided Practice

* Make arrays with the class.
* Discuss process

1. What multiplication equation can I write for this array?
2. How do you know?
3. What is the product of 3x5?

* Three more examples:

Independent Working Time

* Partner Up!
* Each pair should draw a picture of each array on their Array Models for Multiplication Worksheet, along with writing the equation and solving it. A

Assessment

* Draw an array of hearts showing 6x3 on the board. Students must write and solve the equation.

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?”