Objective

By the end of this lesson, you will be able to apply arithmetic concepts to solve problems related to Legos.

Materials and Prep

- Lego bricks
- Pen or pencil
- Paper or notebook

Prior knowledge of basic arithmetic operations (addition, subtraction, multiplication, and division) is required.

Activities

1. Counting Lego Bricks

Take a pile of Lego bricks and count the total number of bricks. Write down the count on your paper. Then, group the bricks by color and count how many bricks are in each color group. Write down the counts for each color. Calculate the total number of bricks by adding the counts of each color group.

2. Building Lego Towers

Build three Lego towers using a specific number of bricks for each tower. For example, Tower 1 should have 10 bricks, Tower 2 should have 15 bricks, and Tower 3 should have 20 bricks. Calculate the total number of bricks used for all three towers.

3. Lego Arrays

Create an array using Lego bricks. For example, make a rectangular array with 4 rows and 6 columns. Count the total number of bricks in the array. Then, modify the array by adding or removing rows or columns and calculate the new total number of bricks.

Fifth Grade Talking Points

- "Arithmetic is an important branch of mathematics that deals with numbers and operations."
- "In this lesson, we will explore how arithmetic concepts can be applied to solve problems related to Legos."
- "Counting is the process of determining the total number of objects in a set. We can count Lego bricks to find out how many we have."
- "Addition is the operation of combining two or more numbers to find the total. We can use addition to find the total number of bricks when we group them by color."
- "Subtraction is the operation of taking one number away from another. We can use subtraction to find out how many bricks are left when we remove some from a tower."
- "Multiplication is the operation of repeated addition. We can use multiplication to find the total number of bricks used for multiple towers."
- "Division is the operation of splitting a number into equal parts. We can use division to distribute bricks equally in an array."