

## Objective

By the end of this lesson, Vera will be able to understand and apply multiplication and division concepts using Minecraft, enhancing her math skills in a fun and interactive way.

## Materials and Prep

- Minecraft (Java or Bedrock Edition)
- A device to play Minecraft (PC, console, or tablet)
- Basic knowledge of Minecraft controls (moving, building, crafting)

## Activities

### • Building a Multiplication Grid:

Vera will create a large grid in Minecraft using blocks. Each row and column will represent numbers. For example, if she builds a 5x5 grid, she can fill in the squares to show the products of numbers 1 through 5.

### • Division Treasure Hunt:

Vera will hide 'treasures' (like diamonds or gold) in different locations. She can create clues that require her to divide the total amount of treasures into equal groups, showing how division works in real scenarios.

### • Crafting Recipes:

Using Minecraft's crafting system, Vera will learn about multiplication by creating items that require multiple resources. For example, if it takes 3 wood blocks to make a crafting table, she can multiply to find out how many wood blocks she needs for multiple tables.

## Talking Points

- "Multiplication is like adding the same number over and over. If you have 3 groups of 4, that's the same as  $4 + 4 + 4$ !"
- "When we divide, we're sharing something into equal parts. If you have 12 diamonds and want to share them with 3 friends, how many does each friend get?"
- "In Minecraft, when you build something, you often need to use more than one block. That's multiplication in action!"
- "If we have a recipe that needs 2 of a certain item to make 1 thing, how many do we need for 5 things? That's using multiplication!"
- "Finding treasures is like a puzzle! When we divide, we're figuring out how to share things fairly."
- "Building a grid helps us see how numbers work together. It's like a math map!"
- "Every time you craft something, think about how many pieces you need. That's a multiplication problem!"
- "Math in Minecraft is not just numbers; it's about problem-solving and being creative!"