## **Objective**

By the end of this lesson, you will be able to apply arithmetic skills to build a new world in Minecraft.

## **Materials and Prep**

- Minecraft game
- Pen and paper
- Calculator (optional)

No prior knowledge is required for this lesson. Just come with an open mind and a willingness to learn!

## **Activities**

- 1. Create a blueprint: Start by designing a blueprint for your dream Minecraft world. Draw a map on paper and label the dimensions of different structures you want to build, such as houses, farms, and roads.
- Calculate area and perimeter: Use your arithmetic skills to calculate the area and perimeter of the structures in your blueprint. Measure the length and width of each structure and apply the appropriate formulas.
- 3. Resource management: Determine the number of resources, such as blocks or materials, required to build each structure. Practice addition and multiplication to calculate the total number of resources needed for your world.
- 4. Budgeting: Imagine you have a limited budget to buy resources in Minecraft. Assign costs to different materials and calculate the total cost of constructing your dream world. Use subtraction to manage your budget effectively.
- 5. Scaling: Experiment with scaling down or up the sizes of your structures. Apply multiplication and division to adjust the dimensions while maintaining the proportions of your blueprint.

## **Talking Points**

- Arithmetic is an important skill in many real-life situations, including building in Minecraft.
- Area is the amount of space inside a shape, and perimeter is the distance around the shape.
- When calculating area, multiply the length by the width.
- When calculating perimeter, add up all the sides of the shape.
- Resource management involves determining the quantity of materials needed for construction.
- By budgeting, we can make sure we don't overspend and use our resources wisely.
- Scaling allows us to adjust the size of structures while maintaining their proportions.
- Remember to have fun and be creative while building your Minecraft world!