Create a Lego Mosaic Using the Grid Method

A mosaic is a picture created by arranging small colored pieces of hard material, such as stone, tile or glass into a design. The grid method is a low-tech drawing technique that reproduces an image onto another surface. All it requires is a ruler, some math, and careful observational skills. This project will use the grid method to break down the image geometrically into smaller squares. In order to create a pixilated mosaic effect, we will be using Legos as our material of choice.

Materials:

- photograph or other image printed in an 8x8 inch format
- Ruler
- Pen or pencil
- Lego baseplate and building blocks

Instructions:

1. On your 8x8 inch reference image, use your ruler to make marks one inch apart across the top of the image. Do the same thing across the bottom of the image. Now connect your marks to create a series of vertical lines across your reference image. Repeat this process on each side to create a series of horizontal lines.
2. Your reference image should now have a 1 inch grid drawn on it. This grid will help you to focus on specific areas of the image in order to recreate it on your Lego baseplate.
3. This grid will correspond to your baseplate on a 1:1 ratio. For instance, based on a 5x5 inch baseplate (16x16 studs), each inch of the grid will equal a square of 4 studs. On a 10x10 inch
baseplate (32x32 studs), each inch of the grid will equal a square of 8 studs. (See the diagrams below.)

4. Once you have determined your proportions, focus on one square of the grid at a time and use your Legos to recreate each square on your baseplate. Because of the square shape and set proportions of the individual bricks, there will not be any curved or angled lines and the image will become pixilated.

**TIPS & TRICKS:**

When choosing your reference image, consider how it will look as a mosaic. Images with simple lines and little detail will make a cleaner finished mosaic.

The larger your baseplate, the more detail you will be able to include.

The grid method only works correctly when there is a 1:1 ratio between your reference image and your finished image. If you want to enlarge the finished image, you will need to increase the grid proportionally to avoid distorting the finished image.

The grid method is adaptable to any size image. Simply adjust your grid to the size of your reference image, ensuring that the finished image utilizes the same proportions.