

## Tessellations: Math Meets Art Part 2

By: Dr. Johnson  
School: Edstar Analytics Math

<b>What Student Will Need:</b>
<p>Computer, phone, or any device with internet access            An account in the self-directed learning resource, connected to me as the teacher            An account in the communication resource, connected to me as the teacher            PDF Handout (created from this lesson form)</p>
<b>Lesson Objective:</b>
<p>The objective of this lesson is that the students will learn to recognize patterns, both number patterns and otherwise. They will be able to predict what comes next. They will recognize reflective symmetry.</p>
<b>Details:</b>
<p>I will use conduct the lesson synchronously, I will distribute the PDFs created by this form.</p>
<b>Review:</b>
<p><u>Review Content</u>            Review the vocabulary. See how many words you have learned. Do it at least twice if you don't know them all. Then watch the video that reminds you of the connection between the math and the art. Tessellations connect math and art.</p> <p>For the final assessment, create a tessellation of triangles that has a two-color pattern, and include at least one anomaly. <u>What is a tessellation?</u></p>
<b>Lesson Flow:</b>
<p><u>Lesson Content</u>            These videos are about patterns, and examples of tessellations.</p> <p><u>Patterns and Tessellations</u></p> <p><b>Instructions for Student:</b>            Watch this video to learn about patterns and how to determine what comes next.</p> <p><u>Self-Directed Resource</u>            On the first exercise, students are asked to complete patterns. On the second, they are to color a plane of tessellating triangles to create a pattern, and include anomalies to make it more interesting.</p> <p><u>Triangles</u></p> <p><b>Instructions for Student:</b>            Complete the Pattern Completing exercises. Then color the triangles in a way that makes a pattern. Include at least one anomaly in your pattern.</p>

Communication With Student

The students need to have accounts in FlipGrid so that their data is saved, and you can give them feedback. You will be able to select a few of the video responses of the students to share with the class. You can look at this using student ID "12345". My prompt is:

Use the word "Anomaly" in a sentence.

**Instructions for Student:**

Answer the prompt.  
Type "12345" to access.

Additional Support

**Instructions for Student:**

Use this tessellation creator to make a tessellation design. Use the triangle or square.

Deep Dive/Challenge

**Instructions for Student:**

Watch this Khan Academy video that shows you how to find patterns in numbers. You can keep going and do some of the exercises that follow the video.

Collaborate with Teachers:

Collaboration with Teachers

Assessment Tool:

Assessment Tool

This is a tessellation creator. Students can use this to make a tessellation.

Additional Links:

How to make a tessellation.

Tessellating Hexagons

This is a page of tessellating hexagons.