



## STEAM - The Art of Math

**Pillar:** STEAM

Utilize STEM skills to create art.

This month we focus on the ways that artists use math in their creations.

Do you love art more than math? Well, turns out math and art have much more in common than you might think. Most of the time, math is used to create artistic masterpieces! If somebody is a painter, they need to measure the amount of paint they need, measure the canvas they are painting on, measure the length of the lines they need to draw and shapes they need to make, and they use ratios to mix colors, among other skills.

Artists use patterns in their projects like polka dots and stripes or rainbow colors. You also use patterns in math! Some examples are a pattern of counting, a pattern with equations to create angles of a shape or a pattern of lines on a graph.

Geometry is important in art. When crocheting in a circle, you increase using multiplication tables. Mandalas and other traditional patterns in textile design and architecture are made of repeating shapes over and over.

Many professionals draw and sketch out their ideas before they create something. They measure their drawings and use math to make their projects life-size. Some of these professionals include engineers, entrepreneurs, architects, bakers, teachers, clothing designers, etc. What do you want to do for your career? How might it include math and art?

Try one or more of the following activities to practice incorporating math and art:

- Color Wheel Clock - <https://craftwhack.com/color-wheel-for-kids/>
- Pi Skyline – Each number in Pi represents a building in the skyline! <https://www.whatdowedoallday.com/math-art-for-kids-pi>
- Fibonacci Art Project <https://www.whatdowedoallday.com/fibonacci-art-project>
- Tessellations - <https://www.whatdowedoallday.com/math-art-tessellations>
- Symmetry Butterfly Art - <https://buggyandbuddy.com/monarch-butterfly-symmetry-art-for-kids/>
- Proportions in Drawing Comic Faces - <https://www.drawinghowtodraw.com/stepbystepdrawinglessons/2010/03/proportions-and-shapes-of-comic-human-faces-heads-cartooning-lesson/>
- Mandalas - <https://www.weareteachers.com/making-mandalas-the-ultimate-art-math-meditation-combo/>

Submit your artwork to our Virtual Art Show! [https://www.gsksmo.org/en/events/virtual\\_art\\_show.html](https://www.gsksmo.org/en/events/virtual_art_show.html)



Want to learn more about the importance of math for artists? These videos explain how math is used by people in a variety of artistic fields.

- Tim Gunn explains how clothing designers use math in their work - <https://www.youtube.com/watch?v=egXZXOSuV34&feature=youtu.be>
- Carla Hall, winner of Top Chef Season 11, explains how math is used in the Culinary Arts. <https://www.youtube.com/watch?v=yD1i3RRV2zg>



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