

Math is Beautiful

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Synopsis

This curricular unit is designed for pre-Algebra students familiar with the concepts of ratios, proportions, similarity, rotation, translation, reflection, and congruency. It is not necessary that they be accomplished artists, but be open to creating art by way of visual math concepts. Students will learn about the style of several Modern Artists of the 20th century and the math concepts applied in their work. Students will apply the concept of a golden ratio as it pertains to golden polygons and the arrangement of objects clustered in a field. Students will also try their hand at tessellations through monohedral, dihedral and aperiodic tilings. Students will practice different techniques for creating modern art using the math concepts learned through their math course and the artistic techniques through their Art teacher. Possible student products would include tessellations as a drawing or stained glass effect, Cubism art through the use of coordinate geometry, and Minimalist Conceptualism using “Writing Across the Curriculum” and acrylic paints. Opportunities to expand math concepts through quilt patterns and other media is encouraged. A portfolio of work will be collected and displayed in an “art crawl” at the school or a local business.