

Home Connections in Mathematics

Math and the Arts

Some of us may describe ourselves as artistic or musical or mathematical or athletic. In reality, we are much more complex and often display strengths, talents and interests in a variety of areas.

The same is true of the subjects we learn in school: no subject is an island unto itself but is connected in many ways with other subjects.

Many teachers in our board have been exploring how arts connect with mathematics and to promote engagement in mathematics through arts. There is beauty in mathematics and one way to discover it is through visual art, music, and dance.

Patterns, shapes, geometry, symmetry, spatial reasoning, and proportional reasoning are all crucial to the creation and appreciation of the arts.

When making a bracelet, a child strings beads in a design that is pleasing to her eye. Mathematically, she may be creating a simple or complex repeating pattern.



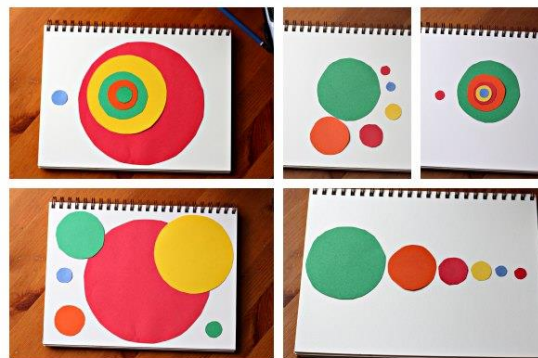
When creating a dance, a student may twirl around, mirror the movements of a partner, move in a rhythm, and draw his arms out in a circular motion to express himself. Mathematically, he is performing transformations using his body and is

showing awareness of spatial reasoning and proportional reasoning in the timing and execution of his movements.

When learning a new song, a child is playing with a mathematical pattern to learn the rhythmic beats or chords in a song. Have you ever tried counting out the beats to a song on the radio?

Check out the fabulous art ideas that we can do with some simple tools at home or at school that apply the Fibonacci number sequence to build circles. Our cuts don't have to be perfect to reveal a really pleasing result!

<http://www.whatdowedoallday.com/2015/01/fibonacci-art-project.html>



Or consider an auditory and visual pattern exercise to explore the patterns in music with eighth and quarter notes in *Homemade Ti-Ti Ta!* Your children will be exploring length as an attribute and representing it visually! You'll find it here:

<http://tinyurl.com/MusicalMathGames>

So, consider looking for the links between mathematics and the arts. Making the links between them helps deepen your children's understanding of both!