Put on Your Math Goggles[®] Integrating Mathematics and the Visual Arts

Rice University School Mathematics Project 2017 Fall Networking Conference Robin A. Ward, Ph.D. raward@rice.edu

Pablo Picasso (1881 – 1973)

Self Portrait (1907) The Old Guitarist (1903-04) Melancholy Woman (1902) Acrobat and Young Harlequin (1905) Boy with a Pipe (1905) Three Musicians (1921) Brick Factory at Tortosa (1909) The Reservoir, Horta de Ebro (1909)

Books by Tana Hoban Dropping in on Picasso by Pam Stephens Getting to Know the World's Greatest Artists by Mike Venezia When Pigasso Met Mootisse by Nina Laden

Put on Your Math Goggles[®]! Seeing Math in a Picasso http://inspirationlab.org/story/4989 Math Meets Cubism https://view.joomag.com/steamed-magazine-october-2015/0392675001443452249?short RUSMP Visual Arts Integration Page https://rusmp.rice.edu/resources/arts

Wassily Kandinsky (1866 - 1944)

Swinging (1925) Yellow Red Blue (1925) Several Circles (1926) Sky Blue (1940)

Coloring Book: Kandinsky by Prestel So Many Circles, So Many Squares by Tana Hoban

©2017 Robin A. Ward, Ph.D. 2017 RUSMP Fall Networking Conference

raward@rice.edu

The Noisy Paint Box: The Colors and Sounds of Kandinsky's Abstract Art by Barb Rosentock The Dreaming Giant: A Children's Book Inspired by Wassily Kandinsky by Veronique Massenot

Put on Your Math Goggles[®]! Seeing Circles in a Kandinsky http://inspirationlab.org/story/8486

Sol Lewitt (1928 – 2007)

Wall Drawing 65 (1971) Wall Drawing 684A (1999) Wall Drawing 915 (1999) Wall Drawing 419 (1984) Four-Sided Pyramid (1997) Corner Piece #4 (1976) Maquette for One, Two, Three (1979) Variations of Incomplete Open Cubes (1974)

Put on Your Math Goggles[®]! Exploring Linear Equations Using Sol LeWitt's Wall Drawings http://inspirationlab.org/story/5573 Crayons in Algebra Class? https://view.joomag.com/steamed-magazine-april-2015/0186174001427333405?short Video by SF MoMA of Variations of Incomplete Open Cubes (1974) https://www.youtube.com/watch?v=w9ROCnWMPww&feature=youtu.be Massachusetts Museum of Contemporary Art http://massmoca.org/sol-lewitt/

Citations

Deasy, Richard J. (2003). Don't axe the arts! *National Association of Elementary School Principals*, 82(3),14-18.

Ruppert, S. (2006). *Critical evidence: How the arts benefit student achievement*. Washington, DC: National Assembly of State Arts Agencies (NASAA).

Ward, Robin A. (2015). *Math + Art = Fun: Activities for discovering mathematical magic in modern art.* Houston, TX: Bright Sky Press.