Put on Your Math Goggles:
Discovering PreK-4 Mathematics Using the Lens of the Visual Arts and Children’s Literature

Robin A. Ward, Ph.D.
Clinical Assistant Professor of Mathematics
Rice University School Mathematics Project
raward@rice.edu  robinanneward@gmail.com

Books by Robin A. Ward
Math + Art = Fun: Activities for Discovering the Mathematical Magic in Modern Art
Numeracy and Literacy: Teaching K-8 Mathematics Using Children’s Literature
Literature-Based Activities for Integrating Mathematics with Other Content Areas (K-2)
Literature-Based Activities for Integrating Mathematics with Other Content Areas (3-5)
Literature-Based Activities for Integrating Mathematics with Other Content Areas (6-8)

7 Elements of Art
• Line  • Shape (2D)  • Form (3D)  • Space (perspective)  • Color  • Value  • Texture

Jasper Johns
Figure 7 (1969)
Figure 8 (1959)
Figure 9 (1969)
0 Through 9 (1960)
Figure 1 (1969)
Numbers in Color (1958-59)
A Place for Zero by Angeline LoPresti
One Hundred Ways to Get to 100 by Jerry Pallotta
How Much, How Many, How Far, How Heavy, How Long, How Tall is 1000? by Helen Nolan
How Much Is a Million? by David Schwartz
A Million Dots by Andrew Clements
Big Numbers: And Pictures That Show Just How Big They Are by Edward Packard
The Day Anthony Counted to a Googol by Mark North
Where Is Jasper Johns (Adventures in Art Series) by Prestel

Hans Arp
Collage with Squares Arranged According to the Laws of Chance (1916-17)
Squares Arranged According to the Laws of Chance (1917)
Probably Pistachio by Stuart Murphy
If You Give a Moose a Muffin by Laura Numeroff
A Very Improbable Story by Edward Einhorn

©2012 Robin A. Ward, Ph.D.  CAMT 2012
Wayne Thiebaud

*Cakes* (1963)
*Four Cupcakes* (1971)
*Sugar Sticks* (1964)
*Three Machines* (1963)
*Seven Suckers* (1970)
*What Is Round?* by Rebecca Dotlich
*Counting with Wayne Thiebaud* by Susan Goldman Rubin
*Delicious: The Life & Art of Wayne Thiebaud* by Susan Goldman Rubin
*The Donut Chef* by Bob Staake
*The Missing Piece* by Shel Silverstein

Paul Klee

*Zitronen* (1935)
*Once Emerged from the Gray of Night* (1917-18)
*Farbtafel* (1930)
*Castle and Sun* (1928)
*Tidying Up Art* by Ursus Wehrli
*Falling for Rapunzel* by Leah Wilcox
*Shapes, Shapes, Shapes* by Tana Hoban
*Paul Klee (Getting to Know the World’s Greatest Artists Series)* by Mike Venezia
*Paul Klee (Adventures in Art Series)* by Prestel Publishing

Georgia O’Keeffe

*Red Cannas* (1927)
*Petunia* (1932)
*My Name Is Georgia* by Jeanette Winter
*Georgia’s Bones* by Jen Bryant
*Cut Down to Size at High Noon* by Scott Sundby
*Actual Size* by Steve Jenkins

Other Useful Resources

Books by Lucy Micklethwait
*Museum Shapes* and *Museum 1 2 3* by The Metropolitan Museum of Art
*Math + Art = Fun: Activities for Discovering the Mathematical Magic in Modern Art* by Robin Ward

Keep your math goggles on!