Title of Book:	Da Wild, Da Crazy, Da Vinci
Author:	Jon Scieszka
Illustrator:	Adam McCauley
Publisher and Date:	Viking /2004
ISBN:	0-670-05926-9

Grade Levels for Recommended Use: Third Grade – Fifth grade

(3.8) Geometry and spatial reasoning. The student uses formal geometric vocabulary. The student is expected to identify, classify, and describe two- and three-dimensional geometric figures by their attributes.

Measurement: (3.11.A) use linear measurement tools to estimate and measure lengths using standard units.

CCSS 3.G.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. <u>http://www.corestandards.org/the-standards/mathematics</u>

Brief Summary: This book is part of the Time Warp Trio series about three boys who are able to travel through time because of the magic of *The Book*. The boys travel to fifteenth century Italy and meet Leonardo da Vinci. It is a short chapter book with each chapter number written backwards like Leonardo wrote. This activity has to do with his famous drawing "The Vitruvian Man" demonstrating ideal human proportions.

Materials needed:

Measuring tapes using the metric side and a meter stick. Have measuring tapes scotch taped to the walls of the classroom from the floor up and across at approximately the students' shoulder height, and name tags with "I am a Square", "I am a tall rectangle" and "I am a wide rectangle".

Suggested Activity: Are You a Square?

After reading the first two chapters of the books, show the pictures on <u>http://en.wikipedia.org/wiki/Vitruvian_Man</u>

There is a Leonardo's drawing of the Vitruvian Man, where a man is superimposed in a circle and a square. Vitruvius, a famous architect, thought that an ideal person's height is the same length as his arm span. Leonardo expanded this study of proportion with other parts of the body.

1. Show the students how high a meter stick is from the floor to your waist. Be sure to point out that the meter stick is 100 centimeters. Have them estimate how many

centimeters tall they are and what they estimate their arm span to be from finger tip to finger tip. They must make the estimate before they actually measure.

- 2. Have students work in pairs to measure their height and arm span in centimeters against the wall where you have taped measuring tapes.
- 3. Decide if the measurements are the same, classifying them "a square", or not the same, classifying them as either being a "tall rectangle" or a "wide rectangle."
- 4. Give them the appropriate name tag.
- 5. Graph the numbers of each type of rectangle. (A square is a type of rectangle.)

Extensions:

Use the other proportions of Leonardo to explore how the student's compare to Leonardo's dimensions.

Using the website, there is also a picture of the Vitruvian Man on the Euro coin used as currency in all of Europe and on the Skylab II patch used by astronauts.

Students can paint on line the "Proportions of the Human Figure" <u>http://www.enchantedlearning.com/artists/davinci/coloring/</u>

Adapted by Dr. Faye Bruun (2011)