

Make and Take — Grades Five and Six

Karen Clark, Vigo County

Rhonda McCort, Decatur Township

The goal of this presentation was to present strategies, ideas, websites, and materials that would supplement the participants' teaching. We supported teachers by giving them practical information to use in their classrooms.

The presentation began with a reading of *Mrs. Spitzer's Garden* by Edith Pattou. Then participants were involved in a “Chalk Talk” answering the question, “What do you know about teaching math?” Chalk Talk is a protocol originally developed by Hilton Smith of the Foxfire Fund and was adapted by the National School Reform Faculty. It is a silent activity, using the chalkboard or large paper, in which participants can write their comments or stand back and reflect as other people write and then write a comment in response.

Next, the presenters shared several ideas and activities. These included:

- The game “Quiz, Quiz, Trade.” In this game, each student is given a card with a math task on it, and partners use the task to quiz each other. Then they trade cards and repeat the process with new partners. Each participant received a package of 3 x 5 cards and a marker to make the game.
- Reference folders. Participants were shown several reference pages that could be used in student reference folders. These included, for example, pages with multiplication tables, a list of rules of divisibility, diagrams of various two- and three-dimensional shapes, and a table of fraction/decimal/percent equivalents. Participants also received a copy of the article “A Powerful Reference Tool” by Mark Ramsay.
- The calculator game “Getting to One.” In this game, the first player chooses a mystery number. She enters the number into the calculator, divides it by itself, and hits =. She then gives the calculator to her partner. He enters his guess, and hits = again. He repeats this process until the number is guessed; the goal is to try and get the number with the fewest number of guesses.
- “Hit the Target” activities. Given a target number, students try to make the number

in several ways. For example, they might add, subtract, or multiply two numbers or combine two or more operations.

- Problem solving strategies and websites (see the websites below). This included sample problems and information on several strategies (including, for example, make a diagram, guess and check, compile an organized list, and work backwards). There was also a form, “Rewrite to Make It Right,” which includes a place for students to write about what they did wrong on a particular task, what they should have done, and how they reworked it. Participants were involved in the discussions and shared their own ideas throughout the presentation.

Reference books:

The problem-solving strategies presented were from *Math Problem Solving Techniques–8 Problem-Solving Strategies and Practice Activities (Grades 4–7)*, by David Stephenson and illustrated by Rod Jefferson (published by Ready-Ed Publications, P.O.Box 276, Greenwood, WA. It is also available online and a free sample can be downloaded from <http://store.atozteacherstuff.com/download-now/red0008.html>).

Websites included:

<http://www.geocities.com/EnchantedForest/Tower/1133/>.

This is Mr. Titen’s More Than Math Page.

<http://www.dupagechildrensmuseum.org/aunty/> .

This is the website for Aunty Math’s challenges.

http://www.glencoe.com/sec/math/algebra/algebra1/pdf/alg1_29.pdf

Here you will find the problem “1000 Ways to Open Lockers.”

http://morrishia.com/david/portfolio/boozy/research/fibonacci's_20rabbits.html.

This website has information about Fibonacci numbers and family trees for rabbits, cows and bees.



Presenter Rhonda McCort at the Make and Take, Grades Five and Six, concurrent session.