

WEBWATCH

Math Class and the Real World

BY DAVID FINK AND CHRIS STOCK

ONE OF the questions math teachers hear from students most frequently is “When will we ever use this in real life?” Just telling them they’ll need it when they get to a higher-level class doesn’t satisfy the students and shouldn’t satisfy the teacher. Teachers need to be prepared to show students how math applies to the real world. Today, teachers can find a variety of activities on the Web that connect the concepts they teach in math class to the real world. The following websites feature a variety of real-life activities and lessons to enable math teachers to connect what they are teaching to the lives of their students.

www.massachusetts.edu/stem/stem%20rhythm%20track.html

Ndugu Chanler, a world-renowned percussionist, breaks down the math behind his drumbeats and connects his rhythms to basic operations involving fractions and time. The site, sponsored by the University of Massachusetts, also features links to related lessons.

<http://score.kings.k12.ca.us/algebra.html>

Aspects of real life, from raising corn to buying a car, appear in a variety of activities that require background research, data representation, and calculations to solve everyday problems. The majority of lessons on this site, brought to you by SCORE (Schools of California Online Resource for Education), require a fairly high level of mathematical knowledge and analysis and would work best in a secondary setting.

<http://library.thinkquest.org/4116>

Let’s take a look at where the basics of math can help us understand real-world problems from other content areas. This site includes activities involving the concepts and calculations behind simple banking, basic operations in music, and keeping track of the expenses required for a vacation.

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<http://pbskids.org/democracy/educators>

Part of the Democracy Project on PBS, this site engages students with the mathematics of the democratic process. Data analysis that relates to statistical representation, calculations, and estimations is central to many of the exercises, from graphing congressional representation to understanding the national debt.

<http://math.arizona.edu/~lagatta/class/sp06/m105/FinanceProject.pdf>

This URL links to a pdf of a detailed lesson plan for an extended project in which students learn about buying a house. From the need to find a job to pay the bills through the search for a house they can afford, students will see the importance of math for financial planning and will conduct multiple calculations along the way.

www.k12science.org/curriculum/popgrowthproj/information.html

The Stevens Institute of Technology Center for Innovation in Engineering and Science Education has created a site that features multiple Web-based lessons that introduce students to power models and population growth. Students will make use of linear, quadratic, and exponential models. A Teacher Guide to this nine-part project is available, as is an Ask an Expert link.

www.ed.gov/pubs/parents/Math/index.html

The U.S. Department of Education provides a great website for parents and teachers to relate math to real life. There are lessons and suggestions for activities that can be carried out at home, in the grocery store, on a car trip, or even in the classroom. Activities involve fractions, percentages, probability, and geometry, but the focus is on the elementary level.

www.sbu.gov/mar/marmmath.pdf

Mary Suiter and Sarapage McCorkle created the lessons in this pdf, exploring real-world math concepts of savings, home decorating, salaries and taxes, and budgeting. Each activity spurs higher-level thinking and allows students to explore concepts in depth and gain a wealth of real-world knowledge.

www.learner.org/interactives/dailymath

Sponsored by Annenberg Media, this site offers an endless array of real-life math applications in such areas as banking, architecture, cooking, population growth, and even gambling. Also included are a variety of tables, charts, and diagrams to help illustrate the application of math in daily life, as well as hands-on activities that let you put classroom math to use in the real world.