Math Goodies
(Website Review)

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Site URL: http://www.mathgoodies.com/

Site Title: Math Goodies

Objectives of Site:
The site states that it features interactive math lessons, homework help, worksheets, puzzles, message boards, and more. Over 400 pages of free math activities and resources for teachers, students, parents, and homeschoolers are available. This site also includes 48 lessons targeted for students in grades 5-8, a math chat area, and a link to an online, one-to-one math-tutoring site. Specific objectives are not mentioned, but it is clear that this site does provide students with a very supportive environment for math assistance.

Audience:
This site's primary audience members are those students in grades 5-8. The homepage of the site does not make this very clear, unless one knows the basic mathematics curriculum topics for grades 5-8. The lessons link, however, does a very good job of clarifying the audience.

Domain related aspects:
A wide array of lessons in pre-algebra, probability, integers, understanding percent, number theory, circumference / area of circles, and perimeter / area of polygons are covered in original lessons. The content covered in each lesson is sequential, timely, clear, and concise. Students have opportunities to be actively engaged in the learning process through online integrative exercises, as well as participating in hands-on exercises. The content per lesson appears to be complete and accurate.

Many external links are provided for homeschoolers. These links provide great support and resources for those homeschooling, as well as useful resources for public and private school educators and students. Many of the external links are well known; all links provide useful information or resources.

I would personally rate the educational value of this site very high for the lessons contained in the site. The lessons provide the structure for obtaining important mathematical objectives, while the discussion group, chat, and availability for a one-to-one mentor provide auxiliary support. The auxiliary tools also provide good support for any math-related questions students may have. Although I highly recommend the site for study purposes, I can't extend the same recommendation for reference purposes. Again, if a student wishes to reference topics covered in the lessons, this site would make an excellent reference site. However, not all math concepts are covered in this site, which does not make it a good overall reference site.

Connectivity:
This site appeared very accessible, and access times appear to be reasonable. It does not require special software for several of its elements, although software titles are recommended for further assistance. No special browser requirements were detected.

Interface related aspects:
The layout of the website is easy to follow with its columnar layout with a consistent navigation column. The site structure is clear upon access and remains consistent throughout the user's operation of the site. The background is color non-intrusive, the fonts readable, and the images are viewable. My only interface related complaint is that some web pages contain horizontal blocks of text that are sometimes truncated in an Internet Explorer browser on a Mac; possibly other browsers. This problem is resolved by decreasing one's font size in the browser. People who are not aware of this, however, will have problems reading all sample questions in the lessons.
Sufficient amounts of information per page are used, especially considering each lesson's objectives. The text and graphics combinations are very appropriate. Graphics are sparingly and appropriately used to decrease wait time. Finding information is easy with the hypertext links in the navigational columns.

The site's search engine contains simple Boolean options and pulldown menus to narrow or broaden searches. Such pulldown menu options include: (1) field, including title, description, or keywords; (2) case; (3) restriction to partial or whole words; and (4) directories included in the hypertext navigational columns. Navigational aids include the site's consistent layout of hypertext links in the extreme left and right hand columns. No other navigational aids are really necessary with this consistent layout design.

Information flow, in general, is logical from one page to another. Several pages contain links to outside resources. When needed, these lists of links are accompanied by quick descriptions. The information flow within the lessons flows logically from one page to another. Several pages are linked directly from the hypertext navigation columns, which produces a direct link sequence, rather than an informational flow.

Effects used include animation sequences and Java scripts. A few samples found in the lessons include probability spinners and practice questions with immediate feedback. Such animation sequences are extremely useful for visual learners.

Overall issues:
Support for the website is provided by Mrs. Glosser's Math Goodies, Inc. This company was founded in 1998 and is committed to creating innovative educational software. The interactive math lessons are self-directed, and aspire to the NCTM Standards for Teaching Mathematics. They are equally committed to providing other online resources to enhance math instruction. Contact information is provided at: http://www.mathgoodies.com/about/mgmg.shtm

Member and affiliates include amazon.com, Educational Software Cooperative, Privacy Partnership, NCTM, GEM, Hewlett-Packard, and Yahooligans.

Advertising is included in the site, but does remain somewhat unobtrusive, since the banners are occasionally found at the top of some windows. Such advertising is clearly differentiated from the main site content, even if the advertisement is for similar information.

Regular updates are apparently maintained. No obsolete links were found, nor did any of the attempted external links fail to connect. The most recent modification occurred within one week of this review.

Best Features:
Resource variety would have to be this website's main asset. Students seeking homework assistance have the options of threaded discussion groups, chat rooms, or one-to-one tutoring sessions. Students seeking new knowledge or review in any of the 49 lessons will find clear and concise information.

Timely updates are very apparent in this well organized site. Students' homework questions are usually answered within a couple of hours. The website appears to be quite adequately maintained. Modification times and the fact that not one obsolete link was found support the fact that this site is obviously well maintained.

Possible Improvements:
Visual improvements in terms of added visual learner support would enhance the site. The Java scripts and animation sequences provided were excellent. I would like to see more examples provided throughout the lessons. It would also be nice if a collaborative white board could possibly be generated to help support students' questions and reflective answers.

Navigational links are complete and adequate. However, I would like to see the navigational links provided in the columns divided into clearer categories. The homepage includes tools, information about the website, curriculum, on-line support, and other evident categories. The navigational links contained in the columns sometimes can be rather lengthy. Providing general categories with mouse-over specific topic selections would be an enhancement, in my opinion.

Conclusion:
This site would be most helpful as a good resource for math homework assistance, relevant external links, and specific lessons for middle school math students and their teachers.