

**MathMagic Internet****Alan Hodson****WHAT IS  
MATHMAGIC?**

**M**athMagic, is a K-12 telecommunications project developed in El Paso, Texas that provides a strong motivator for students to use computer technology while increasing problem-solving strategies and communications skills. In a nutshell, MathMagic posts challenges into each of four categories (Grades: K-3, 4-6, 7-9 and 10-12) to trigger each registered team to pair up with another team and engage in an exchange of problem-solving dialog. When an agreement is reached, one solution is posted for every pair.

**HAS IT BEEN  
DONE BEFORE?**

MathMagic has received wide ideological acceptance by hundreds of present FidoNet users, because it addresses most of the National Council of Teachers of Mathematics standards. It has now expanded into the Internet.

**WHO CAN  
PARTICIPATE?**

This project is aimed mainly at the K-12 teachers and students. Higher Education teachers, librarians, technology coordinators, computer teachers and even home-schoolers are joining to act as facilitators.

**WHAT IS  
NEEDED?**

Any teacher that has access to electronic mail via the Internet can participate. There are several net service providers and most of the commercial boards (America Online, Genie, Compuserve, Delphi, The Well, etc.) are now offering e-mail gateways and other Internet services. MathMagic is best suited for schools that are using computers with modems and have direct Internet access. In some areas, a local Bulletin Board System (BBS) or a Net user (such as a parent with net access) may have to act as a go-between. Please ask about special arrangements.

**DO  
PARTICIPANTS  
“MEET” EACH  
OTHER?**

Each registered team is expected to work with a NET TEAM PARTNER (NTP) who may be local, state, national or international. They must discuss solution strategies and agree on the solution they are going to post. A good measure of the success of the project rests on the “grass-roots” exchanges, when teams “meet” each other and exchange personal/school/city information.

**HOW WILL THE INTERNET BE USED?**

The postings and some team exchanges will be made via MAJOR-DOMO a kind of listserv (automated mailer.) The wonderful folks of the Geometry Forum at Swarthmore College have made their list server available to MathMagic, and as a result, registration will be fairly easy. However, most NTP exchanges are done via e-mail outside the list.

**WHAT IS THE PROCEDURE FOR PARTICIPATING?**

There will be two broad categories of participants: REGISTERED and UNREGISTERED. All registered teams will be entitled to full access to all of THEIR list's mailings, and will have the ability to "post" to THEIR list any question, comment or reply at any time. UNREGISTERED teams, on the other hand, receive all mailings for their list and can read the exchanges, but WILL NOT BE ABLE TO POST directly to it. In other words, subscribers can only read; registered users can post messages and engage in interactive dialog.

**WHICH ARE THE LISTS?**

Roughly corresponding to U.S. grade equivalency, the lists are:

(UNREGISTERED)	(REGISTERED)
mathmagic-K-3-open	mathmagic-K-3
mathmagic-4-6-open	mathmagic-4-6
mathmagic-7-9-open	mathmagic-7-9
mathmagic-10-12-open	mathmagic-10-12

To become registered, a teacher must first subscribe to the unregistered list she/he is interested in. A form is automatically mailed to allow for team registrations.

Can someone subscribe to all lists?

Anyone can subscribe to any/all of the "...-open" lists, but can NOT post messages until fully registered.

**IS GOPHER OR FTP AVAILABLE?**

Anyone can gopher or ftp files from forum.swarthmore.edu. Look for specific instructions below. In addition, educationally-focused groups or sites may want to take advantage of MathMagic as a newsgroup.

**IS THERE A DISCUSSION GROUP OF BENEFIT TO TEACHERS RE/MATHMAGIC?**

One of the most valuable lessons a teacher learns is when she/he can observe and discuss the student's metacognition. For this purpose, a fifth list, *mathmagic-general-open* will also be available to schools of education, assorted professors, teachers, supervisors and in general to all interested parties wanting to discuss math learning and the student exchanges observed in these lists. As MathMagic itself develops, CONSTRUCTIVE

suggestions, observations and criticisms, along with any/all pedagogical discussions that may enlighten student/teacher development will be welcomed. K-12 direct student input is not solicited in this fifth list, although student-teachers may find many of the topics pertinent.

In an effort to make this list relevant, anyone that subscribes to the mathmagic-general-open list and answers a short questionnaire will be granted full access to the list, i.e. will become a registered member with posting privileges.

Since school calendars and holidays differ the world over, registered participants are not expected to address all challenges. A schedule has been developed, and registered users can participate in up to eight (8) postings within a year before having to register again.

**MUST REGISTERED USERS PARTICIPATE IN ALL THE CHALLENGES?**

Posting # :	3	4		5	1
Date posted:	4/25	5/16	6/6	6/27	
Date due:	5/13	6/3	6/24	7/15	
Posting # :	6	7	8	9	9
Date Posted:	7/18	8/8	8/29	9/19	9
Date due:	8/5	8/26	9/16	10/7	
Posting # :	10	11	12	13	4
Date Posted:	10/10	10/31	11/21	12/12	
Date due:	10/28	11/18	12/9	1/6	
Posting # :	14	15	16	17	1
Date Posted:	1/30	2/20	3/13	4/3	9
Date due:	2/17	3/10	3/31	4/21	
Posting # :	18	19	20		9
Date Posted:	4/24	5/15	6/5		5
Date due:	5/12	6/2	6/23		

**WHAT DONATION IS EXPECTED FOR FULL REGISTRATION?**

Information about the nominal registration fee is forwarded to each person subscribing to one of the lists. Please note that the registration form calls for the name of a faculty sponsor, and a team name. Each team's name will consist of the sponsor's last name (surname), a color, the school/ group mascot, and city/state/country information: Hodson's Gold Wolverines/ El Paso, Texas can end up working with Nahim's Blue Tigers/ Tel Aviv, Illinois.

**WHAT OTHER  
“PERKS” ARE  
THERE FOR  
REGISTERING?**

All registered teams will receive a certificate of participation, and two handsome “MathMagic Internet Participant” decals. In general, registered users have more privileges than non-registered users. Soon (and certainly not mandatory,) scanned images or video-clips of the registered sites will be made available (Macintosh formats most likely), but the greatest incentive is the world-wide posting that the student’s responses receive.

**HOW DOES A  
PERSON  
SUBSCRIBE/  
UNSUBSCRIBE TO  
MATHMAGIC?**

Anyone wanting to register must begin with a free subscription to one of the “...-open” lists. Send the following e-mail message:

TO: majordomo@forum.swarthmore.edu  
(No Subject just the message)  
subscribe mathmagic-X-Y-open

where X-Y is either K-3, 4-6, 7-9, 10-12 or general. To UNSUBSCRIBE (when a user no longer wants to be part of the Mailing List) send the same message as above, but replace “subscribe” with “unsubscribe”.

**WHEN DOES  
AN “OPEN”  
SUBSCRIPTION  
BECOME FULL  
REGISTRATION?**

After subscribing to any “-open” list a user will receive an acknowledgment and a REGISTRATION FORM that should be completed and returned to the address below. The account will remain UNREGISTERED until all aspects of the form have been received.

**WHEN IS A  
“GOOD TIME” TO  
REGISTER?**

Most teams try to be ready during the first weeks of the U.S. school year (first weeks in September) but other overseas teams have different school calendars. To accommodate differences, and new students/friendships or changes in a class, the sponsor may change the members of a team, but not the name of the teams (please choose them carefully). Since the eight postings can be done anytime within a year of the registration date, registration for MathMagic can be done at any time.

**WHO CAN  
ANSWER MORE  
QUESTIONS?**

Alan Hodson, middle school math teacher with the El Paso ISD is in charge of the Internet component of the project. Write to him at:

**alanh@laguna.epcc.edu**  
OR,  
**ahodson@tenet.edu**

**WHAT OTHER  
INFORMA-  
TIONAL FILES  
ARE AVAILABLE?**

Carol Hooper, middle school math teacher with Ysleta ISD is in charge of the FidoNet component. Contact her at:

**cshooper@tenet.edu**

Or contact Sherri Gassaway, Net Team Coordinator, volunteer at:

**gassaway@vancouver.wsu.wdu**

One of the distinctive features of MathMagic, is that an effort has been made to make the whole project available for people who only have e-mail capabilities. Any of the files/directories accessed via ftp/gopher can also be accessed via e-mail.

To receive more information on MathMagic and the files available, send E-MAIL (no "Subject:" needed) to:

**mailserver@forum.swarthmore.edu**

Message text: send mathmagic/general.information/INDEX

Once the automated mailer responds, you can request any of the files by replacing the /INDEX of the command above with an exact /filename from the list generated by INDEX (see below).

FTP: Users can also ftp the MathMagic information files thus:

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ftp forum.swarthmore.edu
'FORUM.S...EDU>' login
'Foreign Username:' anonymous
'Password:' (your e-mail 'name'@) example: alanh@
'Welcome to the Geometry Forum...' (whole page deleted)
'FORUM.S...EDU>' cd mathmagic
'FORUM.S...EDU>' dir (lists all directories)
'FORUM.S...EDU>' cd general.information (or any other directory)
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Remember, to retrieve or "download" information to your system you must type the 'get filename' (exact spelling). To move up one directory type (at the > prompt) 'cdup'; to log off type 'exit'. (Don't type the ' ' marks)

GOPHER access is also available:

gopher forum.swarthmore.edu  
 (choose) 2. Forum's Archive/  
 (choose) 7. MathMagic/  
 (choose) 5. general.information/  
 (or any directory in that area)

At the end of each read text (or when you press spacebar <return>) the footer will prompt to mail it. The user must enter his/her name as given by the system (example: alanh) the mailer "knows" the "@..." part.) To move up a directory type 'u' and to end the gopher exchange type 'q' and confirm quit.

Some of the files that can be requested are:

INDEX  
 after-registration  
 fidonet-info  
 fidonet-nodes  
 getting-information  
 mathmagic-carriers  
 mathmagic-faq (THIS FILE)  
 network-providers  
 problem-submissions  
 registration-form  
 sponsors-guide

If you are interested in looking at some of the earlier postings, after gophering in as indicated above choose:

2. Forum's Archive
8. Monthly Digests  
 (From here you can choose the /mm-list and /month):  
 /mathmagic.4-6/archive.Jul.94

The e-mail equivalent to procure previous posts is:

Send e-mail (without subject) to:

mail-server@forum.swarthmore.edu  
 with the command:  
 send monthly.digests/mathmagic.k-3/archive.January.94

——(1)——      ——(2)——

**ARE PREVIOUS  
 POSTS/  
 CHALLENGES  
 AVAILABLE?**

You can replace -(1)- for any of the other lists (mathmagic.4-6; mathmagic.7-9; mathmagic.10-12 or mathmagic-general) and/or replace -(2)- for any other month February.94; March.94, etc. PLEASE notice the dots (periods) in between the words.

**ARE  
USER-MADE  
“CHALLENGE”  
SUBMISSIONS  
ACCEPTED?**

“Adult” involvement is an integral component of this project. Users with thought-provoking (ideally open-ended) word problems are encouraged to make their contributions available to MathMagic. The “problem-submissions” guide can be obtained as outlined above. In addition, each team with more than four postings is responsible for creating one challenge. This student-made challenges will be used later, and will be counted as team credits towards more posting privileges.

**CAN  
MATHMAGIC  
“MAKE A  
DIFFERENCE”?**

The MathMagic Foundation is a non-profit organization for the development and implementation of innovative methods and technology to encourage young people to get involved in articulating math problems. To the extent that teacher-training programs and teachers in the field get involved, master and incorporate telecommunication opportunities like this project, programs like MathMagic can contribute significantly towards achieving NCTM standards and truly “literate” students. MathMagic also attempts to involve concerned professionals in solving some of our students weaknesses by making “challenge” contributions and engaging in the project’s exchanges.

**CAVEAT  
EMPTOR (A  
PERSONAL  
NOTE)**

As worthy an endeavor as MathMagic may seem, both from the theoretical point of view and as a possible resource, presently it is NOT receiving any grants or stipends to allow for “extra” time to be dedicated to the project. Hopefully, with the help of some of the subscribers, this will change in the near future (NCTM/NSF where are you?) Please don’t expect IMMEDIATE service. Be ready to match your professional commitment to finding viable alternatives to our concerns with a good dose of patience! It is ironic how we are able to communicate across the world instantly, but are still slaves of our time pieces!

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