

GIRL SCOUTS OF THE U.S.A.

420 FIFTH AVENUE, NEW YORK, N.Y. 10018-2702

Math partnership

fax cover sheet



Please deliver the following pages:

To: Adriana deKanter

Location: USDOE
NAME OF COMPANY

From: Sheila Lewis

Floor/Dept.: 15

Date: 7/29/97

Fax #: 202 401-3036

Floor/Dept.: _____

Fax #: 202 401-3036
212-852-6515

Phone #: 852-8076

Subject/Title of Piece Transmitted: 2 - MATH - America Counts

Adriana - Please pass on Math problem to Judy Westzel & to your meeting contacts. Also, here's info on a new Rwn pilot for you & Susan. I'll fax it to Carol as well.
Looking forward to Houston

We are transmitting 2 page(s) including this cover page (but not the heat)!
Please advise if message is not clearly transmitted.

If you do not receive all the pages please call us as soon as possible.

Sheila

Thank you.

Interplanetary Mint Math

Girl Scouts USA
contact: Sheila Lewis
212 852-8076

Thin Mints are the most popular Girl Scout Cookie accounting for twenty-five percent of all Girl Scout Cookie sales. They may be thin but if you stack enough of them together you can make a cookie column tall enough to reach to Mars!

Your mission, if you should choose to accept it, is to figure out just how many Thin Mint Cookies that would take. Here two facts to get you started. 1) Each Thin Mint Cookie is eight millimeters thick and 2) the minimum distance between Mars and the Earth is thirty-five million miles.

Once you have "crunched" those numbers, here is something else you can figure out.

We are still waiting for the crumbs to settle to get a count of all the boxes of Girl Scout Cookies sold in the 1996-1997 season. However, we do know that there were 174,742,044 boxes sold in the 1995-1996 cookie sale season. If twenty-five percent of the cookies sold are Thin Mints and there are an average of 36 cookies in each box, how close to Mars would a stack of all of the Thin Mint Cookies sold in the 1995-1996 season go? How many more boxes of Thin Mints would need to be sold to go the distance?

Good luck in your mission to send Thin Mints where no cookie has gone before!

Question 1: How many Thin Mints to Mars

8 millimeters a cookie

1,609,344 millimeters in a mile

201,168 cookies to a mile

35 million miles minimum distance between Earth and Mars

7,040,880,000,000 cookies

Question 2: Distance of Thin Mints sold in the 1995-1996 season.

174,742,044 boxes sold

43,685,511 boxes of Thin Mints

1,572,678,396 Thin Mints

7,818 miles of Thin Mints.

That is 0.0002% of the way to Mars. Only 195,536,314,489 more boxes to go.

Even so, that many cookies is almost enough to make three Thin Mint columns which stretch from New York City to Los Angeles!

submitted by: Mike Moulton
 Chris Bergerson
 Carolyn Kennedy
 "Project Link-Up"
 + Sheila Lewis + Pat Paddock
 "Program Development"

Matz Partnerships



Judy_Wurtzel @ ed.gov
07/31/97 10:35:00 PM

Record Type: Record

To: William R. Kincaid

cc:

Subject: FEOL

Bill- FEOL is an umbrella group of NSBA, NASBE, NEA, AFT, AASA, AACTE, ASCD, NAESP, NASSP etc... that is just getting under way to develop a joint policy agenda.

Shirely Sagawa is their director. This is useful. If they actually were doing something significant in math, we might make this a background for the POTUS event if it doesn't happen earlier and this date works. I didn't mention it to Shirely since they still have no clue what they will actually announce.

Do you think we could share the draft ED-NSF plan with her (not for further distribution) if it might help them get on our wavelength about this??? I could do it when I get back, I suppose when it is closer to done. What is your thinking??

Judy

Forward Header

Subject: FEOL

Author: Judy Wurtzel at WDCT01

Date: 7/31/97 10:31 PM

I spoke to Shirley Sagawa today and wanted to pass on what she told me about what FEOL is doing (although you may well already know).

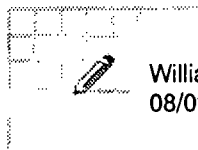
They are planning to have an announcement September 29 in which they unveil a 10 point plan for reading and a xx point plan for math (they haven't figured out how many math points yet). My impression is that the content of the plans is still very much up in the air, especially for math. The plans will show the research backing the points chosen and the commitments of the organizations to address the points.

They will then hold a "summit" of all their exec. committees on this in the winter.

As part of efforts to figure out their math points, on September 3 they are holding a "math seminar" with research experts to hear what they think is needed. I will attend.

I connected Shirely to the Goals Panels papers that I think you all have seen and would be helpful background.

Math Action Strategy



William R. Kincaid
08/02/97 04:29:36 PM

Record Type: Record

To: JSunley @ nsf.gov @ inet, Thomas_Corwin @ ed.gov @ inet
cc: Judy_Wurtzel @ ed.gov @ inet, Daryl E. Chubin/OSTP/EOP, MCozzens @ nsf.gov @ inet
Subject: teacher blurb



URBTCH.BLB

Judy S.--

Attached (and below) is text for a possible box in the action strategy on the teacher recruitment and preparation initiative announced by the President last month. It may need more shortening and possibly the connection to math can be strengthened.

Tom C. --

You're the expert on this. Does it look ok to you?

Comments from others are welcome.

Thanks.

-- Bill

Attracting and Preparing Tomorrow's Teachers: Investing in Quality for the 21st Century

Nationally, two million teachers must be hired over the next decade to accommodate rapidly growing student enrollment and an aging teaching force. The most severe challenges will be faced by high-poverty urban and rural schools, which must hire 350,000 teachers over the next five years, and where many teachers arrive without the qualifications or preparation needed to succeed. In urban districts, up to 50% of teachers leave the profession within the first five years, and in high poverty schools nationwide, one-third of students take math from teachers with neither a major nor a minor in mathematics. Meeting our national challenge requires providing a sufficient number of well-prepared teachers to fill the expected vacancies in urban and rural schools.

President Clinton has proposed a \$350 million initiative to attract talented people of all backgrounds into teaching at low-income schools across the U.S., and to dramatically improve the quality of training and preparation given to our future teachers, with an emphasis on

mathematics and reading. Under the initiative, new scholarships would help bring nearly 35,000 outstanding new teachers into high-poverty schools in urban and rural areas over the next five years. These scholarships could cover costs of tuition, room, board, and other teacher preparation expenses -- and could help fund additional preparation during the first two years of teaching.

The initiative will also provide competitive five-year grants to 10-15 national lighthouse models of excellence -- institutions of higher education that operate the highest quality teacher education programs. Each institution receiving a lighthouse grant will use a majority of these resources to help several other institutions of higher education improve their teacher preparation programs, helping to improve the preparation of future teachers at an estimated 150 institutions of higher education across the nation. Grant recipients would use the most proven and effective strategies, such as: forging strong links between schools of education and their universities' departments of arts and sciences, providing future teachers with mentors and structured opportunities for teaching in elementary and secondary school classrooms, and incorporating the use of educational technology into teacher preparation.

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Math Study



Mary I. Cassell

06/13/97 10:50:52 AM

Record Type: Record

To: William R. Kincaid/OPD/EOP, Daryl E. Chubin/OSTP/EOP

cc:

Subject: Math/Science event

I know you all are working on the public event, as well as other aspects of the action plan for improving math and science education. I was just chatting with Judy W. about the math/science policy statement and event and she suggested I pass along an idea for the public announcement that I mentioned to her.

On the hortatory front, perhaps the President could call on all schools to get rid of the general track for math and science. This is essentially what Equity 2000 does (by putting everyone algebra-track courses). Tracking -- and watered down coursework -- tends to begin in middle school, but sometimes earlier. Getting rid of the general track in middle schools, and even in high schools, would help leverage change in lower grades because kids would need to be taught differently in order to be prepared for more advanced math.

ROUGH DRAFT

DISCUSSION PAPER -- PARTNERSHIPS TO SUPPORT THE MATH STRATEGY

June 17, 1997

#1 Partnership to Improve Math Teaching in Grades 5-8

- Make sure every teacher preparation program provides a strong preparation for those who will be teaching 5-8 mathematics.
 - Prepare paper/statement on what works in teacher preparation for 5-8 math
 - Recruit teacher prep programs to sign-on to principles and develop network of schools
 - Do POTUS event with college presidents and deans in the fall, and challenge additional ed schools to adopt principles
- Make sure that every state (or school district) has a solid middle school/junior high math certification for new teachers.
 - Conduct study on current state licensure practices
 - Get INTASC, or identify another entity, to develop a content-strong model middle school math certification
 - Enlist math-science/business community to push for adoption at state level
- Get at least one National Board certified math teacher in every middle school/ junior high
 - Announce that NBPTS will complete middle school math certification next
 - Commit support for [one teacher/school/year] to prepare for and undertake the NBPTS assessment (99 budget)
 - Private sector match or other form of support?
 - Support one or more networks of middle school teachers preparing for NBPTS certification

(Key issue: whether to focus on honing skills of good teachers or devote more funds to help a broader range of teachers improve their skills)
- Ensure that TIMSS and proven practices are incorporated into continuing professional development for teachers.

- Prepare targeted materials on research findings, successful models and materials.
- Disseminate or place in publications for state board of education members, key state legislators, local school board presidents and superintendents, principals
- Could also target info to vocal groups in math-science community (e.g. engineers) to equip them to "ask the right questions" of superintendents, principals, etc.

#2 Partnership to Provide After-School, Weekend, and Summer Math Enrichment and Homework Help Opportunities

- Could focus on several types of activities, based on community interest, personnel and resources:
 - Math enrichment activities (such as problems that draw on local resources such as libraries or museums), math games, and solving "the problem of the week."
 - Skilled assistance for students with math homework
 - Using paid or volunteer 5-8 math teachers
 - Teachers could be on-site or serving multiple sites via video conferencing/Internet telementoring/homework hotlines
 - Using teacher prep candidates and others knowledgeable about math and math education
 - Engineers or others with strong math background with proper training?
 - Peer assistance for students with math homework
 - Draw on older students, especially aspiring teachers
- Could be held on school site, in libraries or children's museums, at colleges/universities, at federal facilities/offices, or at other locations
- Could be sponsored/facilitated by businesses, math-science community (e.g. Engineers), higher ed
- ED/NSF could provide templates for local programs (as ED has for Read*Write*Now) and high-quality materials with suggested activities

#3 Partnership to Develop, Disseminate, and Engage the Public with a “Math Problem of the Week” to Increase Interest in and Support for Challenging Math

- Problem would demonstrate the caliber of math necessary to succeed on 8th grade math test
 - If successful, could add additional grades
- Contract out for preparation of problems, solutions, and more in-depth discussion of underlying math principles and opportunities for additional practice and learning
- Secure commitment of newspaper publishers to publish new question each week, as well as a brief version of solution to the previous week’s problem
 - Make additional/supplementary materials available from a 1-800 #, on the web, or through NCTM, etc.
- Encourage families to discuss at home, teachers to use as extra credit/go over in class, use as activity for after-school/weekend/summer programs, boy scouts/girl scouts.
- Perhaps could use as basis of local/regional student competitions

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