

"I Need a Drink of Water!"

10 Things to Think About When Working with Elementary Math Circle Students

Brandy Wieggers
Lifetime Girl Scout
SFMC Director
NAMC 2012-13 Director

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SFMC- Quick Facts

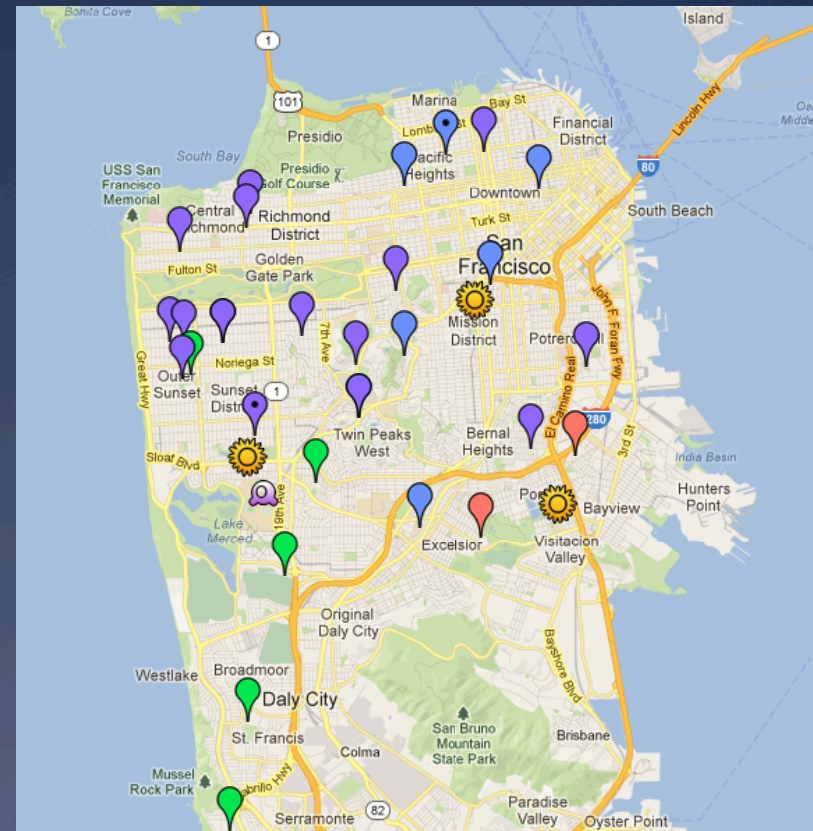
2012-2013

- * 295 students
 - * 32 Elementary students
 - * 99+ students on wait list
- * 12 Teachers

Weekly Program

- * 3 Middle & High School Programs on Monday
- * 2 Elementary on Thursday
- * 1 Teacher Monthly

EVERYTHING IS FREE



1: Campus Rules for Working with Minors on Campus



- * Required Background Checks (\$92) for anyone who would be left alone with the students
- * SFSU Waivers

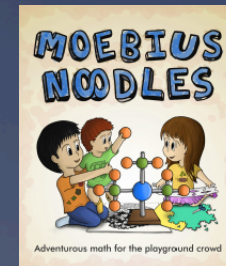
2. Finding Instructors



Math Circle Library

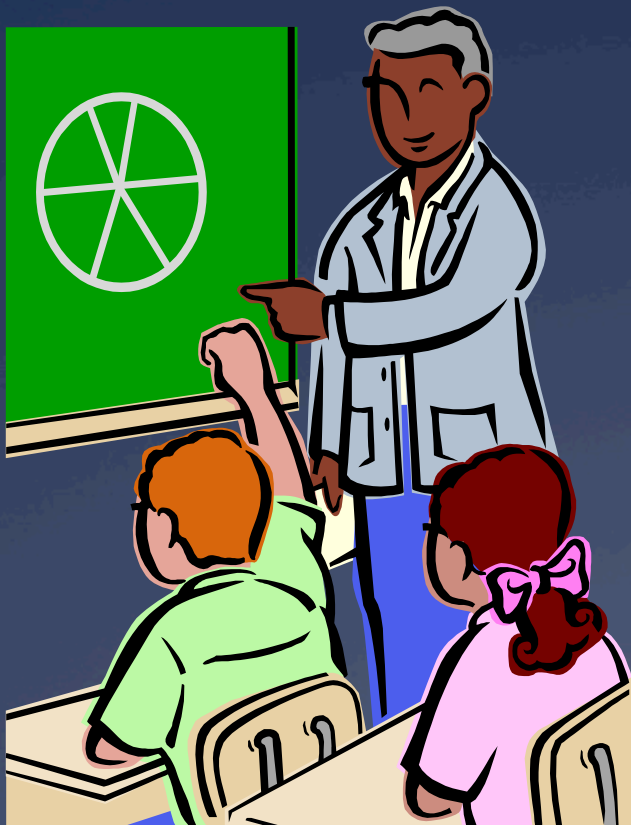


AOPS Beast Academy



Other Resources

3. Finding Enough Instructors Student to Adult Ratios



2 adults in the room for every:

- * 12 Kindergarten students
- * 20 1st-3rd grade students
- * 25 4th – 6th grade students
- * 30 7th – 12th grade students

4. Student Sign Up & Waitlists

How many can we handle?

- * TWO 2nd – 3rd grade classes
 - * 14 students in each class
- * ONE 4th – 5th grade class
 - * 20 students in the class

TOTAL: 48 students

How many do we have?

- * 1st year: word of mouth recruited exactly the number of students we needed
- * Today: 107 students on our waitlist.
 - * Siblings receive priority for being added to the class

5. Student Acceptance Application/ Placement Process

Online Application



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graph TD; A[Online Application] --> B[Wait List]; B --> C[Start of Semester Contact]; C --> D[Interviews for open slots]; D --> E[Accept Students who want to be there];
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The diagram illustrates a five-step process for student acceptance and placement. It consists of five horizontal rectangular boxes, each containing a step name, arranged in a descending staircase pattern from top-left to bottom-right. Each box is connected to the next by a downward-pointing arrow. The steps are: 1. Online Application (purple box), 2. Wait List (blue box), 3. Start of Semester Contact (green box), 4. Interviews for open slots (olive box), and 5. Accept Students who want to be there (red box).

Wait List

Start of Semester Contact

Interviews for open slots

Accept Students who want to be there

5. (cont'd) SFMC Elementary Interview Questions

- * Student: Why do you want to be here (at the Circle)?
- * Student: Did you have fun in the Math Circle today?
- * Parent: Did your student enjoy the Math Circle today and/or last year?
- * Parent: Does your child feel comfortable being in a classroom without you?
- * Parent: How does your child work with other students? Can you give one good example?
- * Parent: Anything else that we need to be aware of when working with your student?
- * Parent: Any other questions or concerns?

6. Paperwork - Waivers



Human Resources, Safety
& Risk Management
1600 Holloway Avenue, ADM 223
San Francisco, California 94132-4252
Tel: (415) 338-1873
Fax: (415) 338-0221
<http://www.sfsu.edu/hrswa>

RELEASE OF LIABILITY, PROMISE NOT TO SUE, ASSUMPTION OF RISK AND AGREEMENT TO PAY CLAIMS

Activity:

Activity Date(s) and Time(s):

Activity Location(s):

In consideration for being allowed to participate in this Activity, on behalf of myself and my next of kin, heirs and representatives, I **release from all liability and promise not to sue** the State of California, the Trustees of the California State University, San Francisco State University and their employees, officers, directors, volunteers and agents (collectively "University") from any and all claims **including claims of the University's negligence**, resulting in any physical or psychological injury (including paralysis and death), illness, damages, or economic or emotional loss I may suffer because of my participation in this Activity, including travel to, from and during the Activity.

I am voluntarily participating in this Activity. I am aware of the risks associated with traveling to/from and participating in this Activity, which include but are not limited to physical or psychological injury, pain, suffering, illness, disfigurement, temporary or permanent disability (including paralysis), economic or emotional loss, and/or death. I understand that these injuries or outcomes may arise from my own or other's actions, inaction, or negligence; conditions related to travel; or the condition of the Activity location(s). **Nonetheless, I assume all related risks, both known or unknown to me, of my participation in this Activity, including travel to, from and during the Activity.**

I agree to hold the University harmless from any and all claims, including attorney's fees or damage to my personal property that may occur as a result of my participation in this Activity, including travel to, from and during the Activity. If the University incurs any of these types of expenses, I agree to reimburse the University. If I need medical treatment, I agree to be financially responsible for any costs incurred as a result of such treatment. I am aware and understand that I should carry my own health insurance.



Mathematics Department
1600 Holloway Avenue
San Francisco, CA 94132
(415) 338-2251 • FAX: (415) 338-1461

SFMC Waiver and Release Agreement for Participants, Minor (under 18-years) and Parents/Guardians

I, the undersigned participant/parent/legal guardian, request permission for myself/child to participate in the San Francisco Math Circle, to begin in September 2012, located at San Francisco State University, Lowell High School, Mission High School and Burton High School (hereinafter referred to as the "activity").

I consent to my/child's participation in the activity and acknowledge that I fully understand my/child's participation may involve risk of serious injury, illness, or death, including losses which may result not only from my/child's own actions, inactions or negligence, but also from the actions, inactions, or negligence of others, the condition of the facilities, equipment, or areas where the activity is being conducted, and/or the rules of play of this type of activity. I understand that if I have any risk concerns, I shall discuss them completely with the Activity Contact before I sign this agreement and before my/child's participation in the activity begins. The Activity Contact for this activity is Dr. Paul Zeitz, zeitz@sfsu.edu, 415-422-4690. The SFMC Activity Contact is Dr. David Bao, who can be contacted in the San Francisco State University Mathematics Department, utilizing the contact information above.

Knowing and understanding the risks involved with participation in the activity, I hereby voluntarily and willingly assume full and complete responsibility for all losses and damages, including injury, illness, and death, resulting from my/child's participation in the activity, including transportation to and from the activity. I agree I am financially responsible for any losses and damages resulting from my/child's participation in the activity.

I certify that I am/child is in good health and has no medical condition preventing my/child's safe participation in this activity. I agree to use my/child's personal medical insurance as the primary medical coverage if accident, injury, or illness occurs. I consent to emergency medical treatment in the event such care is required.

I agree that photographs, pictures, slides, movies, video, or other media coverage of myself/child may be taken in connection with my/child's participation in the activity, without compensation from the State of California, the Trustees of the California State University, San Francisco State University, the University of San Francisco, the Mathematical Sciences Research Institute, the San Francisco Math Circle, and the auxiliary organizations, donors, officers, employees, volunteers, and agents of each of them (hereinafter referred to as the "Activity Coordinators and Faculty Owner") and consent to the use of photographs, pictures, slides, movies, videos, and other media coverage for any legal purpose.

In consideration for my/child's participation in the activity, I hereby waive all claims or causes of action against the Activity Coordinators and Faculty Owner arising out of my/child's participation in the activity and hereby release the Activity Coordinators and Faculty Owner from all liability in connection therewith.

I have read this waiver and release agreement and understand the terms used in it and their legal significance. This waiver and release is freely and voluntarily given with the understanding that right to legal recourse against the Activity Coordinators and Faculty Owner is knowingly given up in return for allowing my/child's participation in the activity. My signature on this document is intended to bind not only myself but also my successors, heirs, representatives, administrators, and assigns.

Minor Participant's signature	Date	Parent/ Guardian's signature (required)	Date
_____	_____	_____	_____
Participant's Name (First & Last)		Please utilize the space below to provide any medical/prescription information that you request be released to emergency medical providers. Also please provide an emergency contact for Monday afternoons.	
_____		_____	
School	Grade Level	Emergency contact- name (print)	_____
_____	_____	()	_____
Current Teacher	() Phone number	Emergency contact Phone number	_____
_____	_____	()	_____
Participant's email address	_____	Emergency contact Relationship to the participant	_____
_____	_____	List medical/prescription information below:	_____
Parent/Guardian's email	_____	_____	_____
Address	_____	_____	_____
_____	_____	_____	_____

The San Francisco Math Circle and Circle for Teachers are programs of the Mathematical Sciences Research Institute funded by the Moody's Foundation and S. D. Bechtel, Jr. Foundation.

SFMC Elementary Policy

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- The maximum number of students that will be accepted at a given time for a class are 20 for a 4th and 5th grade class and 14 for a 2nd and 3rd grade class.
- There will be no less than two adult staff members in each class, where "adult staff member" is defined to be the instructor plus any parents or other adults present (including graduate and undergraduate students).
 - Parental staff members will be invited to participate as a chaperone on a rotating basis as needed; otherwise, parents will not be allowed in class. This will ensure students have the most engaging experience. Unfortunately our program is growing so fast that we don't have an extra room for parents but if you'd like some work space you are encouraged to visit the new SFSU library or student Union Building for a nice cup of coffee.
 - The only exception this may come when one adult staff member must escort a student (in an emergency situation) to the bathroom or other location. In this case no adult staff member will be alone with a single child. Any restroom or similar trips will be done with children in pairs and will leave at least two children in the classroom.
- Students are expected to be able to function independently, in particular, without the supervision of parent or guardian. See (3a) for exceptions.
 - In exceptional (ADA-sanctioned) situations, a student may be accompanied by a professional aide that is qualified to provide necessary services (e.g., transcription). This circumstance will require a specific petition which must be reviewed by the program director(s) for approval.
- All staff members will be required to have safety training provided by the San Francisco Math Circle Directors discussing logistics and pedagogy for working with elementary students. Staff members are also encouraged (but not required) to take CPR training.
- Students are required to have signed SFMC and SFSU waivers in order to participate. Additionally parents will need to review this policy and sign it.
- Students are expected to behave in an appropriate manner, respectful of each other, the instructor, and the classroom. Students and their parents/guardians must recognize that Math Circle participation is a privilege, not a right. Students who behave inappropriately may be given a warning, suspension, or expulsion, depending on the severity of the behavior.
- The SFMC is a program for students who are excited about math; in particular, it is not for students struggling with math. Students and parents will be interviewed by staff members prior to participating in Math Circle to ensure that students are willing to participate. Students must be accepted into the program by the program staff prior to them being able to attend Math Circle.

SFSU Waiver

SFMC Participant Waivers

SFMC Elementary Policy

6. What's in a waiver?

USEFUL PROGRAM INFORMATION

LIABILITY INFORMATION

Waiver and Release Agreement for Participants, Minors (under 18-years) and Parents/Guardians participation in Oakland/East Bay Math Circle.

I, the undersigned participant/parent/legal guardian, request permission for myself/minor to participate in the Oakland/East Bay Math Circle, to begin in September 2010, located at Laney College and Patten Academy of Christian Education (hereinafter referred to as the "activity").

I consent to my/minor's participation in the activity and acknowledge that I fully understand my/minor's participation may involve risk of serious injury, illness, or death, including losses which may result not only from my/minor's own actions, inactions or negligence, but also from the actions, inactions, or negligence of others, the condition of the facilities, equipment, or areas where the activity is being conducted, and/or the rules of play of this type of activity. I understand that if I have any risk concerns, I shall discuss them completely with the Activity Contact before I sign this agreement and before my/minor's participation in the activity begins. The Activity Contact for this activity is [Candy Wiegert, Oakland/East Bay Math Circle Director, 510-642-0143 \(MSRI, business office\), mathcircles@msri.org](mailto:mathcircles@msri.org).

Knowing and understanding the risks involved with participation in the activity, I hereby voluntarily and willingly assume full and complete responsibility for all losses and damages, including injury, illness, and death, resulting from my/minor's participation in the activity, including transportation to and from the activity. I agree I am financially responsible for any losses and damages resulting from my/minor's participation in the activity.

I certify that I am/minor is in good health and has no medical condition preventing my/minor's safe participation in this activity. I agree to use my/minor's personal medical insurance as the primary medical coverage if accident, injury, or illness occurs. I consent to emergency medical treatment in the event such care is required.

I agree that photographs, pictures, slides, movies, video, or other media coverage of myself/minor may be taken in connection with my/minor's participation in the activity, without compensation from the State of California, Laney College, Patten Academy, the Mathematical Sciences Research Institute, the Oakland/East Bay Math Circle, and the auxiliary organizations, donors, officers, employees, volunteers, and agents of each of them (hereinafter referred to as the "Activity Coordinators and Facility Owner") and consent to the use of photographs, pictures, slides, movies, videos, and other media coverage for any legal purpose.

In consideration for my/minor's participation in the activity, I hereby waive all claims or cause of action against the Activity Coordinators and Facility Owner arising out of my/minor's participation in the activity and hereby release the Activity Coordinators and Facility Owner from all liability in connection therewith.

I have read this waiver and release agreement and understand the terms used in it and their legal significance. This waiver and release is freely and voluntarily given with the understanding that right to legal recourse against the Activity Coordinators and Facility Owner is knowingly given up in return for allowing my/minor's participation in the activity. My signature on this document is intended to bind not only myself but also my successors, heirs, representatives, administrators, and assigns.

Minor Participant's signature	Date	Parent/ Guardian's signature (required)	Date
Participant's Name (First & Last)			
School	Grade Level	Please provide one space below to provide any medical/prescription information that you request be released to emergency medical providers. Also please provide an emergency contact for Thursday afternoons.	
Current Teacher	(Area code) Phone number	Emergency contact name (print)	()
Participant's email address		Emergency contact phone number	
Parent/Guardian's email		Emergency contact Relationship to the participant	
Address		List medical/ prescription information below:	

The Oakland/ East Bay Math Circle and Circle for Teachers are programs of the Mathematical Sciences Research Institute funded by S.D. Bechtel, Jr. Foundation, The Firedoll Foundation and the Simons Foundation with the support of Laney College and Patten Academy.

Permission to be at that location and for the students to participate in the event (we understand The risks, etc...)

Permission for Photos and other Publicity usage

No Seriously- We give permission And waive claims Against you and your Organization and your Funders.....

All that info you need for Grant reports

Emergency Info

Contact for Program reminders

Peanut allergy! Insulin Bee allergy?

7. Paperwork – cont'd



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Address _____		_____	_____

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SFSU Waiver

SFMC
Participant Waivers

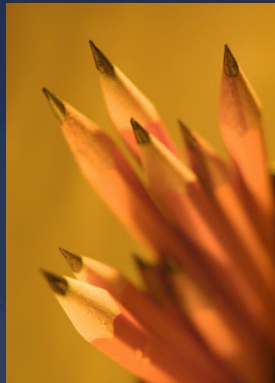
SFMC Elementary Policy

7. Elementary Policy

- * Parental staff members will be invited to participate as a chaperone on a rotating basis as needed; otherwise, parents will not be allowed in class
- * Students are expected to function independently
- * Students are expected to behave in appropriate manner, respectful to each other and the instructors
- * Students unable to attend 3 sessions in a row will be removed from the class.
- * SFMC is a program for students who are excited about math; in particular, it is not for students who are struggling in math. Students and parents are interviewed prior to participating in Math Circle to ensure the students are willing to participate in Math Circles.
- * Parents should drop off students in a timely manner.
- * Parents should take care of students' needs prior to dropping them off.

8. What's in your box?

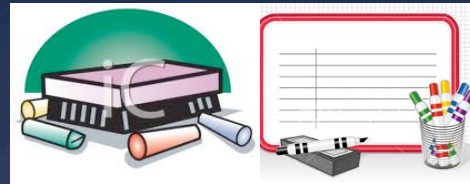
Pencils/ Pens



Graph Paper/
Scratch Paper



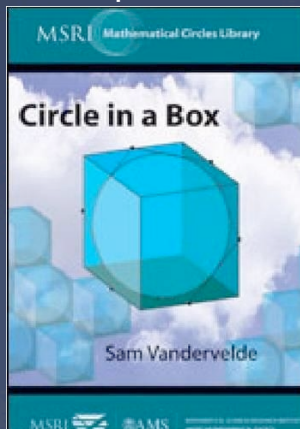
Chalk/
White Board Markers



Snacks



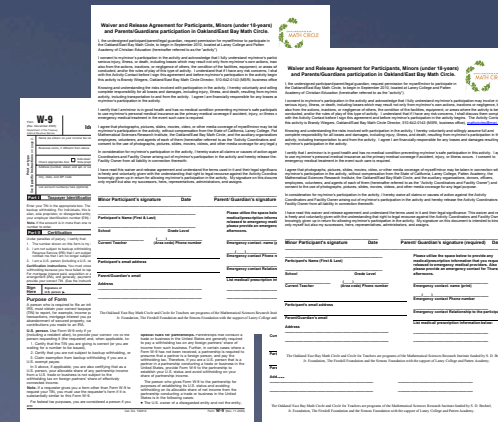
A lesson in your
back pocket



First Aid Kit



Paperwork



9. Use the buddy system

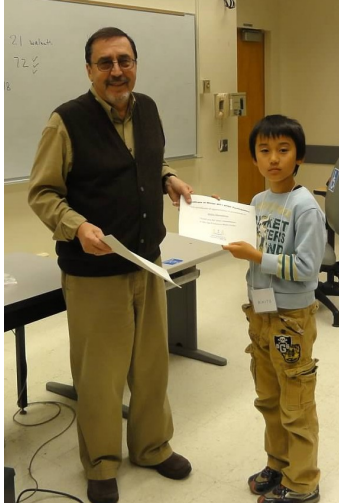
Students use the Buddy System and check-out with an adult when leaving the MC event



Adults use the Buddy System and are Never to be left alone with 1 student.



10. Math Circle is FUN!



The 10 lessons learned...

1. Campus Rules – Background Checks
2. Finding Instructors
3. Finding Enough Instructors
4. Student Sign Ups & Waitlists
5. Selecting Students for the program - Interviews
6. Paperwork: Waivers
7. Paperwork: Student/Parent Agreements
8. Box of Supplies
9. Coming to Class – Buddy System
10. Remember – It's Fun!

San Francisco Math Circle

Brandy Wieggers, brandy@msri.org

