

Puget Soundings



***Ethnomathematics: Pushing Back Against K-12
Traditional School Mathematics***
Spring Dinner - May 20, 2019 - [Register Here!](#)

March 19, 2019

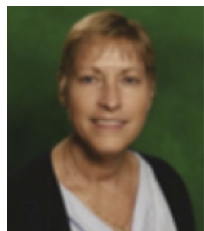
Editor: Joyce Frost (frostjoycee@gmail.com)

Calendar

PSCTM **May 20, 2019**
Spring **Bishop Blanchet HS**
Dinner **Saraswati Noel**

58th NWMC **Tacoma Convention**
Oct. 10-12, **Center/Murano**
2019 **Hotel**

PSCTM Fall **October 21, 2019**
Dinner **Bishop Blanchet HS**
 Dan Finkel -
 Math4Love



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 Jane
 Bissonnette
President-
elect/Social
Media - Traci
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Sharon Young- Secretary,
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Noel, Angela Ensmingers, Lynn Adsit -
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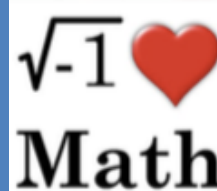
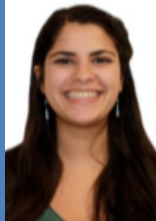
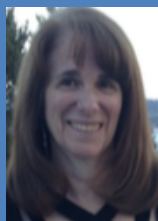
President's Letter - Jane Bissonnette

Believe it or not we are quickly coming to the end of the school year. Hopefully, you fared well during Snowmageddon, 2019. We are all scrambling to catch up with our curriculums, but you owe it to yourself to take a little break and enjoy some time with your colleagues. The Northwest Mathematics Interaction Spring Workshop is on Saturday March 23 - that's this Saturday! ([Register](#)). I enjoy the informal nature of this gathering and always go home with something new to try in my classroom. You do not have to stay for the whole day.

Of course, we are really gearing up for the NW Math Conference being held in Tacoma this October. There are so many ways for you to be a part of this event. We are looking for volunteers to help organize, presenters to share their knowledge, and of course attendees. I look forward to meeting you there.

Our Spring dinner is May 20th at Bishop Blanchet High School (rescheduled from our Winter dinner due to the above mentioned Snowmageddon). This is another great way to enjoy time with fellow math teachers and learn something new. ([Register here.](#))

Finally, we would love to hear from you. Please share a tidbit of classroom knowledge or a fun activity that we can post in our newsletter. I'll close with this quote from Betsey Johnson, "Keep your sunny side up, keep yourself beautiful, and indulge yourself."
 - - - **Jane Bissonnette**, (jbissonnette@bishopblanchet.org)



PSCTM Spring Dinner, May 20, 2019 (Rescheduled due to Snow) ***Ethnomathematics: Pushing Back Against K-12 Traditional School Mathematics - - - Saraswati Noel, UW Ph.D. candidate***

This workshop aims to push back against current US schools euro-centric forms of mathematics as well as exploring the concept of ethnomathematics, the relationship between math and culture.

Participants will engage in mathematical activities that center family, community, indigenous and ancestral knowledge and learn about current efforts to bring Ethnic Studies curriculum to mathematics classrooms in Seattle Public Schools to connect and improve academic success for all students. Saraswati Noel is a former math educator at Seattle World School, which primarily serves recent immigrants to the US. She currently is getting her Ph.D. in Math Education at the University of Washington. Saraswati is passionate about immigrant rights and is committed to diversifying educational materials to create a space where all voices are able to contribute to the growth and development of public pedagogy.

Greta Thunberg: 10th Grade Swedish Activist nominated for Nobel Peace Prize

As a math teacher and now math tutor, I have been so inspired by the students that I work with, describing one particularly amazing girl as someone who will "change the world". Having an extremely talented brother who struggled in school (non-diagnosed dyslexia), I always reminded myself to never underestimate the talent and potential of my students. As we prepare for the 2019 Northwest Math Conference with the theme of "We All Count", I encourage us all to consider the tremendous potential we have in embracing all students and their many and varied talents. [Greta Thunberg](#) has described herself as "'diagnosed with [Asperger syndrome](#), [obsessive-compulsive disorder \(OCD\)](#), and [selective mutism](#)". Interestingly, this is rarely mentioned in the news articles - her activism, voice, and tenacity are what make the headlines! She credits the teen activists at [Parkland school](#) in Florida ([March For Our Lives](#)), as the inspiration to begin her school climate strike.

[Greta Thunberg](#) is a 16 year-old [Swedish](#) political [activist](#) seeking to stop [global warming](#) and climate change. In August 2018, she became a prominent figure for starting the first [school strike for climate](#), outside the [Swedish parliament building](#).^[1] In November 2018, she spoke at [TEDxStockholm](#), in December she addressed the [United Nations Climate Change Conference](#) and in January 2019 she was invited to talk to the [World Economic Forum](#) at [Davos](#). Just this past Wednesday (March 13, 2019) she was nominated for a Nobel Peace Prize. On Friday, tens of thousands of students in 112 countries turned out to join her call for action to combat climate change. - - - **Joyce Frost**

Here is her March 14, 2019 tweet:

Tomorrow we school strike for the climate in 1769 places in 112 countries around the world. And counting. Everyone is welcome. Everyone is needed. Let's change history. And let's never stop for as long as it takes. #fridaysforfuture #schoolstrike4climate #climatestrike



Math Fun!

Here's a great little algebra problem!

What 5-digit number has the following features?

Place an extra numeral 1 at the beginning to get a number three times smaller than if the numeral 1 is placed at the end of the number.

Solution:

$$3(100000 + x) = 10x + 1$$

Note: Adding 100000 puts a 1 at the front of a five-digit number, and multiplying by 10 and adding 1 puts a 1 at the end of a number)

Solve to get:

$$300000 + 3x = 10x + 1$$

$$299999 = 7x$$

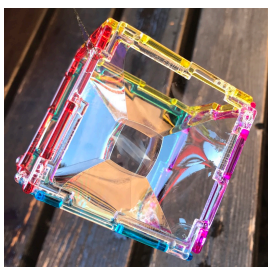
$$x = 42857$$

$$\text{check: } 1428571/3 = 42857 \checkmark$$

Jane Bissonnette, President



Karen Uhlenbeck, Mathematician and professor at the University of Texas.



A minimal surface area soap bubble inside a cube.

From WWU Math Professor Millie Johnson

Millie e 0.0027182818.... forever more

Millie says that most of her time now (outside teaching) goes to running the WWU Great Puzzle Hunt. The next Hunt is Saturday, April 13, 2019.

GREATPUZZLEHUNT.COM

**Join WWU's brain-stretching outdoor adventure race:
The WWU Great Puzzle Hunt!**

REGISTRATION CLOSES April 11, 2019

Saturday, April 13, 2019 @ 10:00 a.m. Red Square

T-Shirts – Music – Food – Prizes – and More!

\$8 Students \$15 Non-Students (Teams of up to 6)

Check-in 10 a.m. Hunt starts at 11 a.m. Prizes awarded at 4:30 p.m.

[Register here](#)

[Check out Official Puzzle Gear](#)

[Watch a YouTube Video from last year](#)

Your mission: *Reach the outdoor location shown on your screen & scan QR code (which starts clock) to receive puzzle. Don't forget your bag of scissors, tape, hole punch, etc. to MacGyver your way through. Once you determine and enter code words, the clock stops, and you are sent to the next destination. Connect all the code words to complete the game!*

For the first time, mathematics' most prestigious prize has been awarded to a woman, Karen Uhlenbeck

[\(CNN\)](#) Karen Uhlenbeck, a mathematician and professor at the University of Texas, has been awarded this year's Abel Prize, a mathematics prize modeled after the Nobels. [It's the first time the prize has gone to a woman.](#)

Niels Henrik Abel (1802–1829), a Norwegian mathematician, made significant contributions to a variety of mathematical fields.

"One of Uhlenbeck's most famous contributions was her theories of predictive mathematics inspired by soap bubbles. The thin, curved surface area of a soap bubble is an example of a "minimal surface," a surface that forms itself into a shape that takes up the least amount of area. Examining how these surfaces behave can help researchers better understand a wide amount of phenomena across a wide array of scientific studies."

58th NW Math Conference 2019

TACOMA CONVENTION CENTER AND MURANO HOTEL

FIRST TIME IN TACOMA!

GET THIS ON YOUR DISTRICT CALENDAR!

October 10th to 12th - Save These Dates!
Reasons you won't want to miss this:

- *K-16 - Something for everyone!*
- *Delve deeper into topics with 3 hr Mini-courses on Thursday*
- *Opening and Closing Keynotes with Dan Meyer and Julia Aguirre*
- *Workshops and Sessions both Friday and Saturday*
- *Ignite Talks Friday night!*
- *Saturday Breakfast with TI - Robotics*
- *STEAM, STEM, and Special Ed Sessions/Workshops*
- *Plan ahead and share this with your friends and colleagues.*
- *This is going to be a memorable event you will want to attend!*
- <https://www.nwmathconf.org/2019>



**SPEAKER
PROPOSALS
Due April 1st!**

[SUBMIT A PROPOSAL](#)

**REGISTRATION
FOR THE
CONFERENCE
Coming April 15th**

[CONFERENCE
INFORMATION](#)

**EXHIBITORS
\$100 off for payment
by May 1st**

[REQUEST A BOOTH](#)



Did you see that?

*Follow PSCTM & NWMC on social media!
 Share your lesson ideas, news with us, too!*

@PSCTM

@NWMATHCONF



Dan Meyer
Opening Keynote



Julia Aguirre
Closing Keynote

58th NWMC Oct 10-12, 2019 Program Schedule of Events (Still under development!)

Thursday: Mini-courses

9am - noon and 1 - 4 pm

7 pm - Keynote, Dan Meyer

Friday: Workshop/Session 8 - 5 pm
Ignite Speakers, 5:30 pm

Saturday: Breakfast with TI Rovers
Workshops/Sessions 8 am - noon
Closing Keynote, Julia Aguirre

Summer Conference Opportunities!

CSTA (Computer Science Teachers Association) Annual Conference, Phoenix, AZ July 7-10, 2019

MAA MathFest, Cincinnati, OH July 31 - August 3, 2019

**Beauty and Joy of Computing
AP Computer Science Principles
Summer 2019 Training Dates**

CS4HS at UW (no 2019 date set yet)

**AP Summer Institutes in Washington
Bellevue SD: June 25-28, 2019
Everett SD: August 19-22, 2019
Pacific Lutheran University: July 8-11, 2019
Spokane Public Schools: July 22-25, 2019
Vancouver Public Schools: July 29 - August 1**

NWMC Speaker Proposals Are Due April 1st!

YES! -- there is still time to submit a proposal to speak at the **Northwest Mathematics Conference** in Tacoma October 10-12, 2019. It doesn't matter if you've not been a speaker before - there is always a first time! We know you have lots of great teaching ideas that other teachers would love to hear about. You may submit a proposal for a 50 - minute session, a 90 - minute workshop, or a 3-hour mini-course. If you have any questions about the submission process, please contact Joyce Frost, Program co-chair. (frostjoycee@gmail.com)

We are looking forward to hearing from you!

Sharon Young, 2019 NWMC Conference Chair

How Close to 100? from Youcubed

Are you looking for a fun game to practice multiplication facts, and emphasize the use of the array model too? Then this game is a perfect fit! "How Close to 100?" is found on the ***youcubed*** website. You can download the game board and directions for free. To play the game you'll need a 100 chart, two dice and a pencil. The first player rolls the dice, and this becomes the dimensions of the array the player will draw and shade in on the 100 - chart. The factors and product are recorded on the bottom of the page, and then player two has a turn to do the same thing. Play continues until the player has covered each square on the 100 - chart. There are many variations of the game to try as well. My students have enjoyed using markers or crayons to shade in the arrays, and we've been using 120 charts in lieu of 100 charts. What modifications will you make to challenge your students? Share your ideas on our Facebook page, or tag us in your Twitter post (@PSCTM).

Enjoy! - - - **Traci Cotton**

<https://www.youcubed.org/tasks/how-close-to-100/>

Check Out These Cool Websites!

You may be a ***MATH NERD*** if your non-math friends regularly send you math items that they think you will enjoy. Enjoy these great math article links sent to me by my friend, **Bob Brodfuehrer**. These math articles appeared in a newsletter that he receives. He thought I might be interested in them. Enjoy! (Click on links).

Joyce Frost

5 Seriously Mind-Boggling Math Facts

Mathematicians Discovered a Computer Problem that No One Can Ever Solve

Images: The World's Most Beautiful Equations

The 9 Most Massive Numbers in Existence

UW Faculty Honors and Awards: "The College of Arts and Sciences offers the Bergstrom Award for Art and Science annually to support faculty projects "that enhance the student experience and bridge the intersection between art and science. The 2018 recipients of the award were Professor Sara Billey and Timea Tihanyi from the School of Art + Art History + Design. Sara and Timea have collaborated on several projects over the years and Timea has collaborated as well with faculty members Sandor Kovacs (co-teaching a Discovery Seminar on art and mathematics for incoming students) and Jayadev Athreya (via a grant from UW's Simpson Center for Humanities)." **UW Department of Mathematics 2018 Newsletter**



Burst and Follow Series (Cellular Automata), 3D printed porcelain, 13"x10"x10", 2018. Timea Tihanyi & Sara Billey.

Photo Credit: Timea Tihanyi

Enjoy hearing about Sara Billey (far left) and Timea Tihanyi's collaboration at the **58th NWMC in Tacoma, WA October 10-12, 2019** where they will be presenting! Notice their 3D printed porcelain sculptures (left).

The New York Times: This 8-Year-Old Chess Champion Will Make You Smile
Overcoming life's basic truth: Talent is universal, but opportunity is not.
 "Tanitoluwa Adewumi, who lives with his family in a shelter in New York City, went from chess novice to chess champion in little over a year. He went undefeated at the state tournament last weekend, outwitting children from elite private schools with private chess tutors."



Northwest Mathematics Interaction Spring Workshop

March 23, 2019, Lynnwood High School - This Saturday!

(18218 North Road, Bothell, WA 98012)

Six Free Clock Hours available for this Workshop!

Sign up at: <https://tinyurl.com/NWMI-Spring-2019>

Art Mabbott, Online Scholars

On-Line Dynamic Geometry Tools

Traci Cotton, Jackson El. Math Coach

It's Time to Make Multiplication Facts Fun!

Jim King, UW Seattle, retired

Swing your partner: The surprising mathematical and artistic power of half-turns, from Escher to vectors.

Joyce Frost, LWSD, Math Tutor

Crafting a Paper Math Publicity Puzzle

Benjamin Leis, MS Math Circle Coach

MathJam @ NWMI

Randall Creek

The Three Square Problem (No, it's not nine!)