

00:16:44 Trena Wilkerson: Hello from Waco, TX!
00:16:44 Mohamed Jamaludeen Thirapusa Mohaideen: Hi Greetings from Mohamed
00:16:46 Jason Wright: Hello from Howland, Maine
00:16:46 Catherine VanNetta: Good evening from Baltimore, MD
00:16:48 Galit Sandaev: hello from Montréal Canada
00:16:48 John Simons: John from Milwaukee. Whassup!
00:16:54 Angela London: Landis, NC
00:16:55 John Creech: Hello, from Logan County, Ky!
00:16:55 Timea Darvas: Hi from MD
00:16:55 Catherine Anderson: Hi, Virginia Beach, VA
00:16:56 Patrick Montague: Hello from Weslaco, Tx
00:16:56 Janice Magauay: Hello from Maryland!
00:16:57 Heide Kaminski: r
00:16:57 Tess Wills: Hi from Portland, OR!
00:16:57 Amy Greger: Hello Sheboygan, WI
00:16:58 Cecila Adamson: Dublin, Georgia
00:17:00 Sandhya Raman: hi
00:17:00 Maricar Najera: HI from WA
00:17:01 Deniz Çakır: Hello from İzmir Turkey,
00:17:01 Trent Thomason: columbia, tn
00:17:02 Sreevelmurugan Vamadevan: Sreevelmurugan from Miami Az
teaching K12
00:17:02 Grace Vaught-Smith: Hi from Rifle, CO
00:17:02 Dr Deborah Smith: Hello from Antioch, TN
00:17:02 Olga Kosheleva: Hello from El Paso, TX
00:17:02 Kathryn Del Prete: Hi!! From NYC!!
00:17:03 Deborah Chapdelaine: Hello from Seattle WA
00:17:03 Tracy Doherty: Hi everyone. Tracy from Kenilworth, NJ
00:17:03 Mary Johnson: HI from Pensacola, FL
00:17:03 Laura Dickerson: Hi from Villa Rica Georgia
00:17:04 Bonnie Lee: hello Bonnie from Felton, PA
00:17:04 dana dulzo: hello from novi michigan
00:17:05 Hilary Kreisberg: Hilary Kreisberg, Massachusetts – Hi
Philipp!!!! So excited for you!!
00:17:05 Jean Nussle: hello from Ocean City Maryland
00:17:06 Aya Zvaigzne: Good evening, most wonderful people, from Nashville,
TN !
00:17:07 Tanya Landry: Greetings from Baton Rouge!
00:17:07 Krish Agrawal: Hi. Im Krish from India
00:17:07 Amanda Blake: Endicott, NY
00:17:07 Monica Roland: Good evening from Savannah, Ga
00:17:08 judy rigney: hi from Cincinnati, Ohio
00:17:08 Heide Kaminski: Tecumseh Michigan
00:17:10 Elizabeth Sasse: Greetings from Greeley, CO. We just had a
fly-over from the military jets!
00:17:11 Velma Guidry: Velma from Beaumont Texas
00:17:11 Rachel Ratliff: Rachel Ratliff from Clarke County Public Schools in
VA
00:17:11 Deirdre Murphy: Hi, from Iowa
00:17:12 William Luke: William C. Luke Central Texas

00:17:13 Necole Atkins-Dowd: Hello from Las Vegas, NV
00:17:13 Jaclyn Murray: Hello from Atlanta, GA
00:17:14 Chance Nalley: Chance Nalley, Ethical Culture Fieldston School,
Bronx NYC
00:17:14 Vicki Roman: Hi from Worcester, MA!
00:17:15 Connie Wooldridge: Hi from Seadrift Texas!
00:17:15 Katie Ingram: Hello from Lumberton, NC
00:17:17 Rosie Barnes: Rosie from Killeen, Texas
00:17:18 Carole Bamford: Hi from Beloeil, Quebec
00:17:18 Darius Hatcher: hello from dc
00:17:19 India Puch: India from Columba, SC
00:17:20 Mary Dugas: Hi Mary, Louisiana
00:17:21 Bina Kachwalla: Hi from New Zealand
00:17:22 Sharon Black-MacKinnon: Good evening from New Brunswick Canada
00:17:22 Laura Cranmer: Hi from Grand Junction CO
00:17:26 David Dai: Happy Wednesday from Mobile, AL!
00:17:26 Kate Reardon: Hello from PA
00:17:27 Ramona Hall: Hello from Charlotte, NC
00:17:28 Emma Farrow: Hello from Cincinnati, OH
00:17:29 Katherine Raiguel: Katherine Raiguel, Willow Grove, PA
00:17:29 Katie Gibson: Good afternoon from central Oregon
00:17:29 Christy Woody: hi from Danville, VA
00:17:30 Lorie Huff: Hello from Fayetteville, Arkansas
00:17:30 Janice Holland: Hi from Suffolk, Va-Janice Holland here
00:17:31 Jennifer Heldenbrand: Hello from Provo, Utah!
00:17:32 Linda Fulmore: Greetings from Phoenix 107 degrees
00:17:32 Nonye Obiora: Nonye Obiora, Boston MA
00:17:33 Necia Swain: Hello from North Carolina!
00:17:34 Anna VonDoom: Greetings from Oak Harbor, WA
00:17:38 Jennifer McMillen: Hi! I am from Fort Worth, TX
00:17:38 Christina Tully: Hi form Las Vegas, NV
00:17:39 Penina kamina: Hello, from Oneonta NY
00:17:39 Melinda Liebau: HI! I am in Virginia Beach, VA
00:17:40 Andrea Kent: hello from Virginia

00:17:40 Archita Vaghasiya: Hello from Boston, MA
00:17:42 Lynn Gustafson: Lynn from Mansfield, TX
00:17:43 Christine Blake: Hello from Albany, NY
00:17:43 Kerri Handel: Kerri from Long Island
00:17:47 Robyn Headifen: kia ora from New Zealand
00:17:48 Matthew Beattie: Hello from Portland, ME
00:17:48 Kristin Asa: Hi from Las Vegas
00:17:49 Cindie Rempel: Hello from Mesa, Az
00:17:49 Maren McMartin: Hi from Minneapolis, MN
00:17:50 Danielle Bentley: Hello from the Home of the Superbowl
Champs--The Kansas City Chiefs!!!!!!
00:17:50 Tonya Sittig: Hello from Goldsboro NC
00:17:52 Linda Rodriguez: Yuma, Arizona
00:17:52 Marla Aehlert: Howdy from Gold Canyon, AZ
00:17:53 Sara Lynn Cannady: Hello, from Sara Lynn Cannady from Sampson

County.

00:17:56 Nannette Baker: Dublin Virginia ya'll
00:18:03 Lesly Brown: Hello from Knoxville , Tennessee!
00:18:07 Brynna Fisher: Indianapolis, IN
00:18:10 Debra Odle: Debbie from Mesa, AZ
00:18:10 Ann Assad: Hi. Paducah KY
00:18:16 Melanie Davis: Winchester VA
00:18:18 bonnie manzon: Vallejo calif
00:18:18 Emily Loda: Hello from Blacksburg, VA!
00:18:21 Stacy Haines: Hi from Mystic Connecticut
00:18:21 Robert Berry: Hi All Robert Charlottesville, VA
00:18:26 Konnie Guthrie: Las Vegas here.
00:18:29 Jacqueline Slade: Jacqueline Slade Tarboro North Carolina
00:18:29 Cynthia Burton-Cottrell: Hello from Indianapolis, IN
00:18:29 Emerson Roman: Hola from Mexico City!
00:18:29 Jenny Palumbo: Hi from NYC
00:18:31 Laurie Barker: Junction Texas
00:18:31 Kathy Woodward: Turner, Maine
00:18:31 Anne Feeney: Hello from Barnegat, NJ
00:18:32 Kelly Ward: Greetings from Angelina National Forest, Deep East
Texas!
00:18:33 Clare Bournigal: virginia
00:18:33 Jani Rima: Hi from Arizona
00:18:34 Kim Ellis: Hi from Winter Park, FL
00:18:37 Gordon Clark: Damariscotta , Maine
00:18:39 Shannon Kealoha: Aloha from Maui, Hawaii
00:18:44 Jill Ethridge: Hello from Smyrna TN
00:18:47 Elizabeth Fabian: Hi from Tok, Alaska
00:18:48 Chantalle Wigley: Hi from Vancouver, Canada!
00:18:49 Rick Elliott: Hi from NH...This is Rick...:)
00:18:53 Leonora Olmos: Hello Everyone from Ontario Ca.
00:18:54 Angela Tseng: Hi from Los Angeles, CA, it's 95 degrees out rn
00:18:56 Amanda Aitken: Hi from Arlington, Texas! :)
00:18:57 Christine Galle: Hi from Iowa
00:18:58 Stephanie Caragher: Hello from NH
00:18:59 Dave Hankin: Hello from Globe, Arizona
00:19:00 Nina Beatriz Saulo: Hi from Philippines
00:19:00 Ali Semanision: Hi from Los Alamos, NM
00:19:05 Rene Stratton: hi from Seattle
00:19:05 Portia Felder: Greetings from Snellville, GA
00:19:08 Jet Yeung: Hello Everyone--Jet from Henderson, Nevada
00:19:09 Linda Weyman: Hello from Jasper, GA!
00:19:09 Cindy Luper: Hi from Arkansas
00:19:11 Denise Walston: Hello from Chesapeake, Va
00:19:17 Beth Snoap: holland michigan!
00:19:19 Susan Bardenhagen: Susan from northern Virginia 35 miles from
DC
00:19:25 Amy Keyser: Hello from Gahanna, Ohio!
00:19:28 Meredith Lamb: Hello from Guyton, GA!
00:19:28 Teresa Bulanda: Hi from Connecticut!

00:19:29 Samantha Bustos: Hello from Collierville, TN
00:19:30 Michael Montalla: Good morning everyone ☺
00:19:32 Wadha Bin Humaid: Arizona
00:19:32 Nely Ara-is: Hi from Norfolk, VA
00:19:33 Chrystina Harich: Hello from SLC Utah!!
00:19:37 Kiera Bruce: Hi from NC
00:19:38 Omar Shehata: Hi from Philadelphia!
00:19:40 Ronald Austria: hi from NC
00:19:46 Rosalyn Bantay: Good morning from Philippines ☺
00:19:46 Daniel Irving: Hello from North Providence, RI!
00:19:54 Peter Omura: Hi all from Woodstock NY
00:19:58 Augusto Lopez: Hi everyone
00:20:04 Heide Kaminski: will we get a certificate for today?
00:20:16 Jennifer Hagman: Hello!
00:20:16 Rowena West: Hi from Madison, Florida
00:20:17 Kerryn Sandford: hi from Melbourne, Australia
00:20:19 Maureen Harden: Hello everyone from Pensacola fl
00:20:22 Jorge Veloso: Hi! This is Jorge Veloso from Dundo city, Angola.
00:20:24 Denise Quarles: Hello from Atlanta!
00:20:25 Ruth Guenther: Hi from Pennsylvania
00:20:27 Crystal Morton: Hello from Indy!!
00:20:30 michael Lanstrum: Welcome from Cleveland, OH
00:20:30 Marilu Deal: Hi from Ottawa, Ontario, Canada
00:20:32 Bonnie Rojas: Hello from Buckeye, AZ
00:20:33 Joyce Meier: Hi from Crystal Lake, IL
00:20:33 Lynda Krivansky: hello from Pennsylvania
00:20:34 Faith Peddie: Welcome everyone! Enjoy tonight's session!!!
00:20:39 Brenda McNeese: Hey all, Brenda from Nevada
00:20:40 Max Hughes: Hello from West Sussex, England
00:20:41 Christina Puga: Hi from Dallas, TX
00:20:41 Dana Rozman: Brown Deer WI
00:20:44 Denise Loy: Hi from Chicago
00:20:46 Debbie Williams: Hi from Stockton, CA!
00:20:48 Eme Grace Suarnaba: hello from Texas!
00:20:49 Denesha Howell: Hello from Mississippi
00:20:52 Kimberly Brown: Hi for Central Arkansas
00:20:53 Sindhu A Muralidharan: Hello from Mumbai, India
00:20:54 Sabrina Alleyne: Hi From New York
00:20:56 Portia Felder: How many are in this session?
00:20:56 Sylvester Major: Hi, from New Orleans, La.
00:20:57 Aparna Shah: Hello from New York!
00:20:58 Evan Cecere: hi from Pittsburgh, PA
00:21:01 Kate O'Grady: hello from Pickwick
00:21:03 Cindy Bryant: Greetings from Springfield, MO
00:21:03 Megan Riley: hi from ohio
00:21:04 Charlene LaChapelle: Hi from West Springfield, MA
00:21:06 Michael Montalla: Do we have certificate? Im patiently waiting
for my certificate from yesterday webinar
00:21:07 Denise Cruz: Hello from Rockledge, Florida
00:21:09 Kimberly Gloska: hello from North Carolina!

00:21:11 Kristina Grannan: Hello, Evansville, IN
00:21:13 joan mascola: Hi. From hammonton, nj
00:21:14 Tina Hill: Hi from northeast TN
00:21:14 Mugdha Patil: hi from Fremont, CA
00:21:17 Ca-Lishea Woods: Hello from Houston
00:21:23 Javier Carbajal: Laveen Arizona in the house!
00:21:24 Amy Robinson: Hello from Danville, Illinois
00:21:41 Cindy Bryant: Yes
00:21:42 Kate Reardon: yes
00:21:43 dawn geshwender: yes
00:21:44 Janice Magauay: yes
00:21:45 Deniz Çakır: yes
00:21:45 Angela Tseng: Yes
00:21:46 Jessica Amann: yes
00:21:47 India Puch: yes
00:21:47 Brian Miller: tes
00:21:47 Denise Cruz: yes
00:21:50 Dr Deborah Smith: yes
00:21:50 Denesha Howell: yes
00:21:50 SAPNA SHARMA: Greetings to everyone
00:21:58 Linda Rodriguez: Are we on video?
00:22:17 Jamie Winslow: does Philipp have a mic...kinda sounds far away
00:22:21 Wendy Kraft: Silverdale, Wa
00:22:34 Faith Peddie: You are not personally on video Linda but the chat
is saved.
00:22:35 Omar Shehata: Sound is good for me
00:22:59 Hilary Kreisberg: It worked!
00:23:02 Leanna Foreman: Yes it did
00:23:02 Denise Cruz: yes
00:23:03 Faith Peddie: Yes the audio worked!
00:23:07 Veronica Kwok: OMG I love Harry Potter <3
00:23:10 Mary Anne Opila: Hi, from Pennsylvania
00:23:17 Michael Montalla: Yes. Audio worked
00:24:01 Catherine McGee: hello from CO
00:24:06 Danife Palisoc: Hi everyone! Danife Palisoc from EMHS, NC
00:24:15 Marissa Bay: Hi from Chicago
00:24:36 Danielle Leger: This is Danielle Leger from Irmo SC
00:24:48 Elisa Allan: Hello from San Diego, CA!
00:25:10 Norma Zúñiga: Hello from Mexico City.
00:25:10 ANALINE BAUTISTA: analine Bautista here from the Philippines
00:25:43 Marie Hannon: Hi from Illinois
00:26:46 Brian Miller: Been there. Beautiful mountains.
00:26:58 Melissa Luzano: Kamusta @Analine
00:27:13 Inga Clark: Hi from Tasmania, Australia
00:27:18 RIOLEN RUDIO: Good morning Frim Philippines
00:27:30 David Barnes: Hello all,
Philipp is in the U.K. so the bandwidth is a bit lower than normal. Thanks for
understanding.
00:28:09 Hilary Kreisberg: Also after midnight for Philipp!
00:28:13 Katerina Fanouraki: Hello from Birmingham, England

00:28:19 Cindy Bryant: So great to see so many from all over the world!
00:28:20 Carly Jardinier: Hello from MD, USA :)
00:29:31 Faith Peddie: Please keep in mind that Phillip is presenting in Germany so there may be a bit of lag!
00:29:47 Andina Dwiyani Anwar: good morning from Indonesia
00:29:47 Jamie Winslow: DAVID BARNES, I knew that name! I worked with your wife at NRPA! Left NRPA about 8 years ago to go back to school to be a math teacher. :)
00:29:55 Kelli Epperson: Hello From PA
00:30:25 Alicia Thompson: Hello from Arkansas, US!
00:30:39 Shasta Hankins: Hello from West Virginia
00:30:40 Alison Frost: This is our 17th year here, not a good year to plant baby trees.
00:30:43 Mayumi Makuta: Hello from São Paulo, Brazil!
00:31:02 Alison Frost: Hi Shasta – waving from Beckley
00:31:39 Zhongwei Li: Hello, from Austin, TX
00:31:49 Pamela Liegl: Hello from Streator, IL, Love the science and math.
00:31:53 Ross Russell: Hello from California!
00:32:01 Tyra Ray: Hi from NC
00:32:09 David Barnes: Hi Jamie!, I'll be sure to tell Krista, Thanks for being part of the 100 Days. Hope the teaching is going well.
00:32:23 Sunil Singh: Salutations from Toronto:)
00:32:25 Yelena Kirillina: Tennessee is here
00:32:42 Cindy Bryant: Please change your setting to all panelists and attendees.
00:33:08 Norma Gordon: Hello Sunil!
00:33:30 Michelle Davey: Northern Michigan
00:33:40 Jamie Winslow: great! :)
00:33:43 Leighann Feola: Hello from Sugarloaf, Pa..This is Leighann
00:33:46 Aisamuddin Ridhuan: 🙏
00:33:56 Norma Gordon: Perfect name for the function!
00:34:03 Cindy Bryant: Viewing option should be at the top of the page.
00:34:05 Michael Fralick: Hello from Flor-abama
00:34:13 Marcus Vinícius Pereira: Done
00:34:22 Scott Fellows: Be sure to change the "to:" to all panelists and attendees
00:34:32 Regine Childs: Hallo from Bodensee
00:35:06 Gabrielle Richie: Thanks, I had mine set to just panelists!
00:35:23 Jamie Winslow: this is really interesting...could be a good hook for students
00:35:30 Cindie Rempel: This is interesting, I hadn't thought of it this way.
00:35:46 Bernita Johnson: I thought it was Park Place I should be buying!!
00:36:09 William Luke: Thinking about monopoly this way is cool.
00:36:17 Lisa Priel: Lisa Priel in Grande Prairie, AB Canada
00:36:23 Hilary Kreisberg: Love these real world connections!
00:36:36 Leighann Feola: we use monopoly with probability and chances in Alg 1 keystone class..great ideas though

00:37:10 Marilu Deal: You are good
00:37:12 Gloria Flores: I am using monopoly with financial literacy
00:37:14 Janice Magauay: yes
00:37:14 Amanda Mills: We saw the slides, yes
00:37:16 Angela Tseng: we can see you!
00:37:20 Gloria Flores: I also used it with percent
00:37:22 Carly Adams: We can see
00:37:26 Cindy Bryant: Please change your To: All panelists and attendees
00:37:49 Leighann Feola: I like the roulette options for data and stats
00:38:25 Thomas Triolo: check out the movie the Accountant - this inability
to create random numbers is highlighted in it.
00:38:27 Amy Tucker: Great book!
00:38:32 Baron Hannsz: is something like that used to conclude that covid19
was of natural origin vs man made?
00:38:32 Jerra Wood: I thought I was giving my students random numbers
once, and then realized on the way home that every number I gave was a road number I
traveled on the way home.
00:38:33 Faith Peddie: A recording of the presentation will be available
tomorrow at www.nctm.org/100
00:38:35 Ali Semanision: I love that book!!!
00:38:35 Ca-Lishea Woods: I love this book and we talk about it in my
class!
00:39:28 Leighann Feola: Who were the authors of the Simpson book please?
00:39:32 Kate O'Grady: what book - sound cut out
00:39:37 matthew roberts: Simon Singh
00:39:44 Leighann Feola: Ty
00:39:50 Kate O'Grady: thnx
00:39:53 Lora Saarnio: Mathematical Secrets of the Simpsons. Great read!
00:40:03 Faith Peddie: Mathematical Secrets of the Simpsons
00:40:12 Deirdre Murphy: I'm in elementary and I love sharing math stories
whether I expect them to solve or not but just so that they see that it's real life
all around us.
00:40:17 David Barnes: Doh!
00:40:33 Aparna Shah: Love reading the history of Pythagoras with students
00:40:36 Tasbiha Chowdhury: will the recorded webinar be emailed to us?
00:40:39 Rosie Barnes: I got a Google update in 15 seconds
00:40:43 Marcus Vinícius Pereira: Love tessellations!!!
00:40:56 Aparna Shah: Did a tessellations project recently!
00:40:57 Teresa Bulanda: used with Mc Escher art
00:41:00 Faith Peddie: mathigon.org/polypad
00:41:03 Aparna Shah: Escher art forms
00:41:30 Chonda Long: If you have a question, you can type it in the Q and
A box.
00:41:33 Randhelle Arma: Yes its really a nice tool to get students attention
and a good hook for them.
00:42:01 Deniz Çakır: real life connections encourages students
00:42:24 Teresa Bulanda: art connection works for many students
00:42:34 Melissa Luzano: MC Escher rap in Family Guy:
<https://www.youtube.com/watch?v=Q8WLBmMoII>
00:42:43 Gabrielle Richie: Love the art connection!

00:42:46 Aparna Shah: Love it
00:43:02 Stephanie Bell: Art & math ♥♥♥
00:43:07 Roselyn Bantay: ♥
00:43:08 Yelena Kirillina: my grandson loves tessellations. He is only
5. But knows more about geometry more than my students because he plays geometry and
enjoys it
00:43:19 Mary Anne Opila: good connections
00:43:19 Amy Tucker: I love the iOrnament app.
00:43:22 Amy Tucker: Very soothing!
00:43:24 Susanne Perrino: The best Art & Math
00:43:25 Marcus Vinícius Pereira: Art connection is marvelous
Gabrielle!
00:43:49 Darius Hatcher: nice
00:44:01 Deniz Çakır: I tried it, really funny
00:44:08 Teresa Bulanda: this is what our students need to explore math
concepts
00:44:10 Melissa Luzano: MC Escher rap looped for one minute:
<https://www.youtube.com/watch?v=zRaAKl34SWY>
00:44:10 Laurie Cunningham: I love to use tessallations to draw in the
kids that are extremely artistic.
00:44:16 Jacqueline Slade: awesome
00:44:22 Ana Alcaraz: this is awesome!!!
00:44:30 Teresa Bulanda: platonic solids!
00:44:31 Dr Deborah Smith: I love this!
00:44:33 Amanda Mills: Might some students have trouble focusing when
looking at tessellation patterns like those? What I mean is it may hurt there eyes.
00:44:47 Scott Fellows: Please be sure to change the "to" to All panelists
and attendees
00:45:01 Amanda Mills: I'm just wondering if anyone has come across this
problem.
00:45:07 Stephanie Bell: Ehat a great way to have students help decorate the
classroom while doing math. Also helps builds community
00:45:08 Alison Frost: Amanda, I have eye trouble but I find tessellation's
soothing – just geeky
00:45:27 Laurie Cunningham: This reminds me of Donald in mathematic land
00:45:45 Marcus Vinícius Pereira: Yeah
00:45:49 Amy Tucker: Yes, mathematic land!
00:45:52 Ana Alcaraz: Laurie...I loved that video when I was young
00:45:55 Amanda Mills: Has anyone else lost sound?
00:45:58 Aisamuddin Ridhuan: awesome
00:46:02 LaShawn Digbohau: Love that idea Stephanie Bell
00:46:05 Amy Tucker: I can still hear it.
00:46:10 Tina Hill: flashback to the 60s
00:46:11 Brian Miller: no, I still have sound
00:46:12 Cindy Bryant: My sound is working
00:46:12 Leonora Olmos: yes, I love tesellations too.
00:46:23 Teresa Bulanda: did Sierpinski's triangle with kids too
00:46:26 Jimmy Jam Lyons: Excuse my French, but this is fucking great
00:46:29 ANGELA Hayslett: I have sound.
00:46:39 Yelena Kirillina: Students also love "The flatland"

00:46:44 Lisa Priel: Times Tables, Mandelbrot and the Heart of Mathematics
<https://youtu.be/qhbuKbxJsk8>

00:46:52 Amanda Mills: Ok, got sound back.

00:47:03 Jacqueline Slade: wow

00:47:05 Faith Peddie: imaginary.org/program/surfer

00:47:05 Teresa Bulanda: this is math that inspire!

00:47:12 Kimberly Brown: Is there a seamless place for tessellations in grade 7 or 8 math, not just art work

00:47:39 Teresa Bulanda: yes rigid motion transformations

00:47:40 Cruz Flores Vazquez: As in like, where in the academic year to introduce it?

00:47:45 Jennifer Hagman: @Kimberly Brown - when you discuss geometric transformations

00:47:50 Cruz Flores Vazquez: It could be discussed when introducing geometry

00:48:12 Aparna Shah: I do it with Transformations in Grade 8

00:48:43 Marcus Vinícius Pereira: Math and music is also na awesome experience!

00:49:10 Hilary Kreisberg: Always amazed by you, Philipp!

00:49:19 Kimberly Brown: @ Cruz Flores Vazquez with what topics can it be integrated?

00:49:20 Teresa Bulanda: this kind of activities is fun and learning!

00:49:25 Konnie Guthrie: Math is beautiful and math is everywhere.

00:49:37 Michelle Barrera: i love this!!

00:49:40 Sandhya Raman: Love this one- visual and connecting well to the content...

00:49:49 Jennifer Hagman: WOW

00:49:56 Brian Miller: Yes it is. I use beats and rap to teach algebra at times

00:49:56 Katie Ingram: did anyone write that website down?

00:49:59 Deirdre Murphy: So Beautiful.

00:50:01 Maryn Foote: I really liked the music with the visual

00:50:04 Amanda Mills: Oh, this is excellent. Feel like I can show this to students who don't like math, but love music, and be like "See? You do math in here, too!"

00:50:06 Rebecca Peiffer: mathigon.org

00:50:06 Jennifer Austin: <https://imaginary.github.io/web-hexachord/>

00:50:06 Dr Deborah Smith: This gives new meaning to STEAM!

00:50:10 Katie Ingram: thank you!

00:50:10 Cruz Flores Vazquez: imaginary.github.io/web-hexachord/

00:50:14 Deniz Çakır: music is math with feeling :)))

00:50:17 Jennifer Austin: [https://imaginary.org/program/surfer](http://imaginary.org/program/surfer)

00:50:18 Maryn Foote: imaginary.github.io/web-hexachord

00:50:24 Jennifer Austin: <https://www.ultrafractal.com/>

00:50:27 Janice Magauay: Imaginary.github.io/web-hexachord/

00:50:31 Jennifer Austin:
<http://www.science-to-touch.com/en/index.html>

00:50:41 Scott Fellows: Please change the "to" to all panelists and attendees

00:51:00 Amanda Farrell: If anyone compiles a list of the websites please share! I can't keep up!

00:51:04 Min Zhao: Could you stop chatting because it is annoying

00:51:14 Jimmy Jam Lyons: Take a picture of the screen with your phone

00:51:16 Jamie Winslow: you can close or minimize your chat box :)

00:51:48 Min Zhao: When you do it tells you and flashed when you do close the chat box

00:52:21 Kevin DeLand: try opening the chat box and hiding it in the corner of your screen

00:52:35 Darius Hatcher: 33%

00:52:35 Jennifer Hagman: @Min - click the downward carrot at the top of the chat window..then "pop out" ..then stick it behind the video screen so you can't see it

00:52:38 Deanne Wah: all the time?

00:52:46 Ahmed Raza: if the sum of two one is larger than the orther

00:52:53 Angela Tseng: 2/3?

00:52:53 Leanna Foreman: thinking 33% as well

00:52:54 mark vasicek: Isn't it 1:2. If one piece is more than half the length, it is no longer a triangle.

00:52:54 Maryn Foote: 1/3?

00:52:57 Leighann Feola: 33

00:52:59 Amy Robinson: Should be a pretty high probability. So long as the legs are not equal or one longer than the sum of the other 2

00:53:00 Michelle Barrera: 33%

00:53:02 Delia Kwon: 1/3

00:53:07 Gloria Flores: 33%

00:53:11 Michael Montalla: 1/3

00:53:16 Aparna Shah: I think 1/3

00:53:18 Jacqueline Slade: 1/3

00:53:19 Sindhu A Muralidharan: 100%

00:53:20 Latasha Little: 33%

00:53:21 Kiera Bruce: 1/3

00:53:22 Shauna Brown: 1/3

00:53:22 Sreevelmurugan Vamadevan: 1/3

00:53:23 Denesha Howell: 1/3v

00:53:26 Amanda Aitken: 1/3

00:53:28 Denesha Howell: 1/3

00:53:33 Gabrielle Richie: 1/3

00:53:35 Karin Keener: 1/3

00:53:36 Youjin Kim: 66%

00:53:38 Dave Hankin: 0

00:53:39 Stacy Haines: 50%

00:53:43 Jessica Amann: 1/3

00:53:44 Barbara Harvey: 66

00:53:44 Mary Anne Opila: 1/3

00:53:45 Linda Thommen: 66%

00:53:47 Heide Kaminski: 100

00:53:49 SAPNA SHARMA: 1

00:53:50 Jorge Veloso: Less than 50%

00:53:55 Min Zhao: 1/3

00:53:56 Ramona Bankston: 1/3

00:53:57 Susanne Perrino: 1/3

00:53:58 Kanosha Stone: 50%

00:54:02 Dave Hankin: Exactly!

00:54:07 Mark Phipps: 3/4

00:54:10 Merrellyn Banks: 2/3

00:54:11 Jaime Pacilio: Great exercise to do with dry spaghetti

00:54:21 Cindie Rempel: Great idea!

00:54:27 Brian Miller: ort oothpicks

00:54:31 Veronica Kwok: ^^I was thinking about using dry spaghetti

00:54:42 Veronica Kwok: Or maybe some thicker noodle

00:54:46 matthew roberts: toothpicks are harder to break tho

00:55:00 Ann Wycoff Bagshaw: Meter Sticks and rulers

00:55:21 Melinda Liebau: I have used linguini, it doesn't roll off the desk,
but is easy to break

00:55:24 judy rigney: we cut up straws

00:55:25 May Voltz: I've used pipecleaners

00:56:00 Tina Hill: coffee stir sticks work

00:56:04 Alison Frost:
https://www.enasco.com/medias/Math-Pasta-Triangles-Lesson-Plan.pdf?context=bWFzdGVyfGltYWdlc3wxMjYyMDV8YXBwbGljYXRpb24vcGRmfGltYWdlcy9oNzUvaDlhLzgz4NzI2ODE1NzAzMzQucGRmfDZkMDg2ZmE4YjhmYzgz1MjdhNzlhNzdjNzBmYzRhZmQ3OWEyZgz3NGU5MGJjMGY1YTRjODFkMWEwZjZkODk0MjY&pk_campaign=Math&pk_source=blog

00:56:15 Alison Frost: Spaghetti triangles sample lesson plan

00:56:19 Portia Felder: 1/4!

00:56:31 Mark Phipps: Ugh, had it backwards.

00:56:32 bonnie manzon: very cool 1

00:56:57 Patricia Seamon: Very interesting way to represent this.

00:57:25 bonnie manzon: Only a couple of minutes? hmmm

00:57:40 Kevin DeLand: 1) it has to be even

00:57:53 Sabrina Nikaghanri: 1033

00:57:59 Omar Shehata: why does it have to be even?

00:58:03 William Luke: 1025

00:58:06 Katie Ingram: has to be at least two rows

00:58:06 Min Zhao: Hmmm...

00:58:12 bonnie manzon: I only have 150 marbles

00:58:17 Jaime Pacilio: 1554

00:58:20 Portia Felder: 1001

00:58:21 Darlene Purcell: 1003

00:58:21 Laurie Cunningham: 1333

00:58:22 Amy Tucker: But the two rows are not equal.

00:58:22 Emma Farrow: 1013

00:58:22 Melody Sutton: 1024

00:58:24 Kevin DeLand: any odd number can be represented by $(N + (N-1))$

00:58:28 Darius Hatcher: 1580

00:58:30 Rebecca Peiffer: Because all odd numbers can be represented
by 2 rows, with one being one less

00:58:30 Barbara Harvey: 1113

00:58:35 Youjin Kim: 1500

00:58:36 Amy Robinson: 1024

00:58:37 Deanne Wah: 1001
00:58:39 Deanne Wah: 1003
00:58:44 Archita Vaghasiya: 1500
00:58:45 Kelsey OKeefe: 1500?
00:58:45 Amy Robinson: 2^{10}
00:58:46 Leighann Feola: 1003
00:58:48 Teresa Bulanda: 1234
00:58:50 Ramona Bankston: 1500
00:58:50 Beatriz Reyes: 1500
00:58:50 Amanda Flores: 1998
00:58:54 Rebecca Peiffer: My guess is 1024 because it's 2^{10} and
numbers in those patterns tend to fail these kinds of things
00:58:55 Amy Robinson: 1024
00:58:57 Mary Anne Opila: 1003
00:58:59 Jennifer Hagman: 1024 seems right
00:59:00 Jean Nussle: 1597
00:59:00 Archita Vaghasiya: 1500
00:59:00 Jacqueline Slade: 1202
00:59:06 Michael Montalla: 1024
00:59:20 Leighann Feola: no 1024
00:59:47 Amy Robinson: Just had a problem about this and we determined that
the numbers = 2^n can not be.
00:59:54 debbie zeineddine: wonderful
01:00:00 Portia Felder: good call on being even; "any odd number can be a
trapezium"
01:00:33 Mark Phipps: 1024
01:00:50 debbie zeineddine: bravo rebecca
01:01:11 Portia Felder: @Amy good job
01:01:23 Michael Montalla: Yeheey..im correct
01:01:34 Sunil Singh: This reminds of the question of 200 people sitting
in an auditorium, each with an assigned seat number 1 to 200. A larger number is
shown to everyone and announced that two people sitting side by side are not factors
of this number...what are the seat number?
01:01:50 Dave Hankin: These look great!!
01:02:31 Amy Tucker: Yay, @Sunil!
01:02:42 Veronica Kwok: What was the other website?
01:02:57 Sunil Singh: nrich and plus are awesome!
01:02:58 SAPNA SHARMA: wow thank you for sharing
01:03:01 Kevin DeLand: <https://parallel.org.uk/>
01:03:07 Leonora Olmos: wow super amazing
01:03:09 Yelena Kirillina: Very inspiring!
01:03:13 Leonora Olmos: love it
01:03:28 Alison Frost: This is a really impressive tour
01:03:31 Cindy Bryant: Yes, Beth Kobett! Nrich problems are GREAT!
01:03:32 Cruz Flores Vazquez: the Number Devil!
01:03:35 Julian Laferrera: I love The Number Devil!
01:03:35 Cruz Flores Vazquez: Great book!
01:03:36 Faith Peddie: Do you have a specific question Debbie?
01:03:48 Leonora Olmos: 🙌
01:03:48 Veronica Kwok: Thanks @ Kevin

01:04:04 Samantha Bustos: wow that went fast. is numberphile a youtube thing bc that's all I found for it

01:04:04 Shwetaabh Mishra: I am currently reading "Fermat's Last Theorem" currently.

01:04:04 Kelly Ward: The Man Who Counted by Malba Tahan is another great math book

01:04:11 Faith Peddie: Do you have a specific question Mary?

01:04:12 Deniz Çakır: Great

01:04:16 Shwetaabh Mishra: Its a nice book

01:04:23 Leonora Olmos: I'll have to check it out

01:04:27 Samantha Bustos: also missed the mathcareer one. I just got math career not the entire site...

01:04:33 Deniz Çakır: fibonacci numbers

01:04:39 Shwetaabh Mishra: Its very interesting

01:04:44 Youjin Kim: Philipp, thank you so much! This session is what I have been looking for since I decided to become a math teacher!

01:04:47 Deanne Wah: mathcareers.org.uk

01:04:55 Aparna Shah: monty hall!

01:05:00 Kate O'Grady: these are great! Thank You!

01:05:07 Amy Tucker: I do love the colors.

01:05:13 Brian Miller: mathscareers.org.uk

01:05:14 Samantha Bustos: thanks deanne. ooh it can't be reached from where I live. bumer

01:05:16 Veronica Kwok: The graphics are so beautiful!

01:05:17 Yelena Kirillina: Many thanks!

01:05:20 Denesha Howell: awesome

01:05:28 Sunil Singh: Mathigon is a free site!!

01:05:30 Leonora Olmos: thank u

01:05:33 William Luke: Origami is great for all grade levels,

01:05:35 Jaime Pacilio: This is neat!

01:05:37 Sunil Singh: You should see their Polypad

01:05:40 Maryn Foote: transformations!!!! YAY

01:05:42 matthew roberts: Ive used mathigonwith my students this year a lot they seem to like it

01:05:44 Mugdha Patil: beautiful! awesome resources!

01:05:45 David Barnes: @Jamie - Krista says Hi and was saying how amazing you are. Glad you're a math teacher! And please let me know if there is anything I can help you with for NCTM - Dave - dbarnes@nctm.org.

01:05:47 Pamela Liegl: Thanks Philipp for all the great ideas.

01:05:48 Mary Anne Opila: cool!

01:05:48 Aparna Shah: Very cool!

01:05:49 Michael Montalla: Wow 😊

01:05:57 Aya Zvaigzne: Enormous gratitude for this

01:06:00 Delia Kwon: nice!

01:06:03 Kelsey OKeefe: We are using this in distance learning and love it.

01:06:04 Youjin Kim: This is brilliant!

01:06:05 Charlie DoddSomerton: All pre service Math teachers need to be exposed to this

01:06:06 Hilary Kreisberg: Yay exploding dots!

01:06:08 Kanosha Stone: Great resources

01:06:08 Catherine Anderson: This is awesome!!
01:06:08 Jacqueline Slade: great
01:06:12 Marcus Vinícius Pereira: Wonderful presentation!
01:06:14 Amy Tucker: Kapow!
01:06:24 Kelly Ward: Philipp: Your presentation is top notch! Wow! I
can't wait to explore these resources.
01:06:28 Jaime Pacilio: It works on the iPad!! Fantastic
01:06:28 Gloria Flores: love the resources
01:06:30 Kelsey OKeefe: Thank you!
01:06:30 Aya Zvaigzne: This is a blessing for so many students
01:06:35 Danife Palisoc: awesome!
01:06:36 Niniek Budhiastuti: Wonderful! Thank you very much for the ideas
01:06:41 Sunil Singh: ((Clapping))
01:06:41 Amy Tucker: Thank you so much!
01:06:43 debbie zeineddine: THANK YOU so much
01:06:44 Alok Mathur: Woke up at 4.30 am to see this from India. Great
experience!
01:06:44 Kathleen Knight: Thank you
01:06:44 Peter Omura: Thank you!
01:06:44 Maryn Foote: Thank you for the shares everyone and to you
Philipp.
01:06:45 Julian Laferrera: Thank you! I really appreciated this
01:06:46 Sreevelmurugan Vamadevan: Wonderful
01:06:47 Melissa Luzano: Amazing!
01:06:49 Aparna Shah: Thank you so much
01:06:49 Jennifer Hagman: This was amazing!
01:06:50 Crystal Morton: Thank you!!
01:06:51 Michele Gribben: I love your Mathigon website. Excited for
more of the sections to be filled in. Thank you so much!!!
01:06:51 Phil May: Thank you!
01:06:51 Necia Swain: A wonderful webinar! Thank you!
01:06:53 Hilary Kreisberg: SO so proud of all your work, Philipp!
01:06:54 Yeon Je Cho: Thank you
01:06:54 India Puch: This will certainly help students to think outside
the box
01:06:54 debbie zeineddine: crazy applause
01:06:55 Kristine Barrett: Thank you!
01:06:57 Dave Hankin: Wow!
01:06:57 Janice Magauay: great info! Thank you so much!
01:06:58 Cathy Collins: Wonderful!
01:06:59 Barbara Harvey: Thank you
01:06:59 Brenda McNeese: Thank you.
01:07:00 Michael Montalla: Thank you so much. Is Mathigon free?
01:07:00 Noe Eugenio: Nice presentation! Thank you Philipp!
01:07:01 Inga Clark: Thank you. Amazing!
01:07:01 Cindy Bryant: Excellent Phillip!
01:07:01 Ramona Hall: Thank you so much!
01:07:01 Henry Vas Nunes: Thank you!!!!
01:07:02 Aisamuddin Ridhuan: thank you
01:07:03 Diane Thole: Wonderful resources thanks!

01:07:03 Sharon Black-MacKinnon: Thank you so much for sharing!
01:07:03 Trena Wilkerson: Excellent! Thank you Philipp!
01:07:03 Patricia Seamon: Fantastic resources
01:07:04 Sabrina Nikaghanri: amazing!
01:07:05 Shwetaabh Mishra: Thank you. It was great.
01:07:05 Diane Leighty: Thank you!
01:07:05 Min Zhao: Thank You !!!!
01:07:05 Mary Youngblood: thank you.
01:07:06 ΧΡΙΣΤΙΑΝΑ ΜΑΤΕΝΤΣΙΔΟΥ: thank you for the webinar!
01:07:06 Isabel Reid: ohh my God. You are great.
01:07:06 Cindie Rempel: This was very interesting and inspiring. Thank you!
01:07:06 Maria Sampson: wow, this was awesome material!!
01:07:06 Brandy Gunels Johnson: thank you
01:07:07 William Luke: Thank you. A great presentation.
01:07:07 Marion Lichty: Thank you!
01:07:07 Ildenice Costa: Thank you so much for your explanation!
01:07:07 Laurie Cunningham: Thank you
01:07:08 Carly Jardinier: Thank you so much! Great webinar!
01:07:08 Carole Bamford: Thank you!
01:07:08 Matt Skoss: Sensational session Philipp! Loved it!
01:07:09 Marie Hannon: Thank you
01:07:13 India Puch: thank you
01:07:13 Dana Bennett: Thank you! Lots of great ideas!
01:07:14 Jacqueline Slade: thank you so much!!!!
01:07:14 Min Zhao: Amazing!
01:07:16 Maureen Charron: thanks
01:07:16 Rosie Barnes: Thank you, very interesting!
01:07:16 Leighann Feola: thank you great games and ideas..mathigons is great!
01:07:17 Arika Collins: These at
01:07:18 ALEX QUYENVO: the site, do you think it's easy to use, do we need
osme sort of training to use it
01:07:19 Gloria Flores: Thank You
01:07:19 Deniz Çakır: thank you so much for wonderful presentation
01:07:20 Phil May: I'm absolutely loving Mathigon!
01:07:20 Kendra Edwards: Thank you.
01:07:20 ALEX QUYENVO: mathigon
01:07:21 Katerina Fanouraki: Thank you so much!!
01:07:21 Robert Coulas: Where will this recording be posted? Thank you!
01:07:25 Sindhu A Muralidharan: Thank you so much! This was an enriching
session.
01:07:26 Monica Roland: Thank you!
01:07:26 Svitlana Pshenychna: Thank you so much. Amazing resource
01:07:27 Danielle Bentley: Thank you so much! The resources given were
amazing!
01:07:27 Jaime Pacilio: Wow, you are awesome
01:07:30 Rick Elliott: Thank you so much
01:07:31 Kathy Woodward: Thank you so much. Stay healthy and safe. :)
01:07:32 Mugdha Patil: I cannot wait to start using these! finally so many
resources for older students!
01:07:35 Chonda Long: The recording will be posted at www.nctm.org/100

01:07:35 SAPNA SHARMA: THANK YOU PHILLIP
01:07:37 Gabrielle Richie: Thank you!
01:07:38 Evgenia Krivuleva: Thank you
01:07:39 Irada Mohammadi: Thank you!
01:07:40 Elizabeth Sasse: This was all super interesting! I am excited
to try many of the suggestions.
01:07:40 Deirdre Murphy: Elementary?
01:07:40 Steve Breslow: Lovely overview of resources and helpful suggestions
- always looking for students to bring their problem solving to life.
01:07:40 Leonora Olmos: yea
01:07:43 Isabel Reid: Thank you very much for the great presentation and
ideas
01:07:43 bonnie manzon: awesome
01:07:43 Michelle Barrera: Thank you so much!!!!
01:07:45 Mariano Cano Santos: Thank you very much
01:07:45 Danife Palisoc: email add of Mr. speaker please
01:07:46 Shasta Hankins: thank you
01:07:47 dana dulzo: thank you so much
01:07:49 Leighann Feola: Sweet! ty..I teach middle School
01:07:51 Charlene LaChapelle: Thank you so much for all of this
information.
01:07:52 Randhelle Arma: Thank you for this very informative webinar
01:07:54 SAPNA SHARMA: I REALLY ENJOYED IT.
01:07:56 Laneshia Lamb: in awe
01:07:56 Samantha Bustos: What was the numberphile website?
01:08:00 Leonora Olmos: thank u so much
01:08:01 Feng Chu: thank you!
01:08:03 Cindie Rempel: Free! No way! Wow, thank you!
01:08:04 Deanne Wah: numberphile.com
01:08:04 Kate Reardon: Thank you1
01:08:05 Rene Stratton: thank you!
01:08:06 Catherine Anderson: Tonight's webinar was amazing! Thank you so
much for sharing all of this information!
01:08:07 Kiera Bruce: This was very informative! Thank you so much!
01:08:09 Jennifer Hagman: Numberphile is on YouTube
01:08:12 Brian Miller: numberphile.com
01:08:14 ΧΡΙΣΤΙΑΝΑ ΜΑΤΕΝΤΣΙΔΟΥ: the mathigon site is amazing! thank you for
this fresh math approach!
01:08:14 Randhelle Arma: it amazed me
01:08:14 Arika Collins: These are great resources! Thank you for this
informative presentation!
01:08:15 ANALINE BAUTISTA: THANK FOR THIS enriching sharing
01:08:16 Jerra Wood: This has been visually stunning! Thank you so much!
01:08:17 Laneshia Lamb: super cool presentation
01:08:18 Elizabeth Sasse: It reminds me a lot of the work I've done in
Math Teacher Circles and Math Student Circles. Math Circles are worth checking out!
01:08:18 Esther: This was wonderful! Thank you!
01:08:19 P. MOHAN RAM: thank you very much
01:08:19 Shelley Hunter: Wonderful presentation. Thanks for all the ideas and
resources!

01:08:22 Kellie Whitford: Thank You!!!!

01:08:24 David Barnes: The recording will be posted at
<https://www.nctm.org/100>

01:08:29 Rosalyn Bantay: Thanks for the ideas! Amazing! I love arts ♥♥♥

01:08:40 Jet Yeung: Thank you for all the information. Great visual
slides. I will try the games with my class.

01:08:41 Sunil Singh: What was your own school experience like with
mathematics?

01:08:43 May Voltz: This was brilliant! THANK YOU!

01:08:43 Marilu Deal: So many rich resources!

01:08:48 Karen Notestine: Thank you!

01:08:48 Dr Deborah Smith: This webinar was very informative. Thank
you very much for all of the resources.

01:08:52 Rhonda Prater: Thanks. Lots of great ideas.

01:08:53 Kimberly Brown: This presentation was wonderful!!!

01:08:53 Mark Phipps: What is your favorite math problem?

01:08:56 Stacy Haines: Brilliant!!

01:08:59 Mary Anne Opila: Thank you!

01:09:00 Dana Rozman: Website is Waaaaayyyyyy Cool.

01:09:00 Susan Troutman: Thanks!

01:09:01 Sharon Laahs: Wonderful presentation - thank you!!

01:09:01 Jeanetta Glass: Mathigon is outstanding. I can't remember how I
discovered it earlier this year.

01:09:02 Min Zhao: Awesome! :). :D

01:09:02 Archita Vaghasiya: Thank you for the resources! Amazing
experience

01:09:02 Lorie Huff: Thank you!

01:09:04 Anna VonDoom: Best talk I've attended so far. Thank you very much

01:09:08 Cynni Nazari: Thank you so much - this was super inspiring!

01:09:11 Deborah Chapdelaine: can you post your resources with the course

01:09:13 Wendy Kraft: Thank you for sharing your expertise!

01:09:14 Lynda Krivansky: thank you - amazing!

01:09:14 Marcus Vinícius Pereira: Thanks Philipp. Great presentation!
I've already known Mathigon and used that in class but today I had many other
ideas!!!

01:09:14 Sabrina Alleyne: Thank you, excellent Presentation!

01:09:17 Kerryn Sandford: excellent resources, thank you fo rmaking
them freely available!

01:09:19 Essence Brice: Thank you Phillip! I love all of the new resources
to introduce different topics for student buy-in!

01:09:22 Krish Agrawal: Thanks! It was worth being awake at 4:30 (IST)

01:09:23 Yelena Kirillina: So informative and interesting! Time flew

01:09:24 Deborah Chapdelaine: great!

01:09:27 Aya Zvaigzne: thank you TONS

01:09:31 Daniel Irving: Thank you for this incredible presentation and
invaluable resources! I cannot wait to begin to use them with my students!

01:09:35 Konnie Guthrie: Thank you. Very Engaging

01:09:35 Galit Sandaev: thank you :)

01:09:35 Connie Wooldridge: Lots of useful websites.

01:09:38 Deborah Chapdelaine: Thank you so much

01:09:40 Jennifer Salzano: Thank you this was awesome!
01:09:43 Amy Tucker: This is so great! :)
01:09:43 Carole Bamford: That's fantastic!
01:09:43 Dave Hankin: Philly!!
01:09:46 Stacy Haines: How do you handle differentiation?
01:09:47 Sabrina Alleyne: Great Resources!
01:09:51 Samantha Bustos: thanks for everyone's help. the websites are
great
01:09:54 Gena Morton: This was incredibly cool--thank you!
01:09:57 Alison Frost: Great question!!!!
01:10:01 Matt Skoss: This time is most helpful for us Aussies! Thanks!
01:10:03 LaShawn Digbohous: PA!!!
01:10:12 Sabrina Alleyne: From Sabrina, Thank you!
01:10:34 Dave Hankin: Originally from Bucks County
01:10:48 Niniek Budhiastuti: Thanks for the question, That really sound
my question as well.
01:11:01 Thomas Triolo: check out Jo Boaler's books and website for Math
growth mindset. low floor high ceiling stuff
01:11:06 Delia Kwon: games
01:11:12 Cindie Rempel: may I have the twitter acct. one more time.
01:11:25 Beth Snoap: philipp@mathigon.org
01:11:34 Susanne Perrino: Thank you so much!
01:11:39 Sharon Ling: Thank you!
01:11:42 ALEX QUYENVO: thank you
01:11:43 Aya Zvaigzne: Thank you times ten to the 18th power
01:11:44 matthew roberts: Thank you!
01:11:46 Ana Alcaraz: Thank you!
01:11:46 Amy Tucker: Thank you again!
01:11:46 Chrystina Harich: Thank You!!
01:11:47 ΧΡΙΣΤΙΑΝΑ ΜΑΤΕΝΤΣΙΔΟΥ: thank you!!
01:11:47 Stacy Haines: I have a raised hand
01:11:47 Ali Semanision: Thank you
01:11:49 Yin-Tzu Huang: thank you!
01:11:51 Beth Snoap: I'm from Bucks County PA too!
01:11:51 Cecilia Lopez: Thank you!
01:11:52 Vicki Roman: Thank you!
01:11:52 Michael Montalla: Thank you so much
01:11:53 Shauna Brown: Thank you
01:11:54 Shwetaabh Mishra: Thank you!!!!!!
01:11:54 Emerson Roman: ¡Gracias!
01:11:55 Delia Kwon: thank you! Good night!
01:11:56 Melissa Luzano: SO COOL!!!
01:11:58 Snehal Deshpande Roy: thank you!
01:11:59 Maria Padiernos: Gracias!
01:12:00 Dave Hankin: Thank you from Globe, Arizona!
01:12:00 Beatriz Reyes: Gracias
01:12:00 Ca-Lishea Woods: Thank you! This was super cool!
01:12:00 Randhelle Arma: Thank you
01:12:00 Aparna Shah: Muchas Gracias!
01:12:01 Kanosha Stone: Thank you

01:12:01 Faith Peddie: philipp@mathigon.org
01:12:02 Denise Cruz: Thank you so much!
01:12:03 Jaleesa Sampson: thank you
01:12:05 Deirdre Murphy: thanks
01:12:06 DOREEN LUCKEY: Thank You!
01:12:06 Elizabeth Sasse: Thank you so much! This was a very well-spent hour.
01:12:07 Beth Kobett: Thank you! This was fabulous!
01:12:07 Rowena West: Fantastic, informative webinar. Loved every second.
01:12:09 Cheri Kelley: Thank you!!!
01:12:09 Mariana Soldini: thank you!!!
01:12:11 Paul Curtis: Great webinar!
01:12:11 Charles Clark: Thank you
01:12:12 Susanne Perrino: This was awesome!
01:12:13 bonnie manzon: sehr schon
01:12:17 Enkelejda Limani: This was awesome!!!
01:12:17 Beth Snoap: thanks so much for all those great sites and ideas!
01:12:17 Katherine Raiguel: Thank you Douglas, I also teach in Philadelphia. There is a lot of math trauma and anxiety, and little growth mindset. We are working on that as well
01:12:17 Michelle Webb: Thank you!!
01:12:18 ANGELA Hayslett: Thank you!
01:12:18 Deniz Çakır: thank you so much!!!
01:12:20 Eda Aydemir: Great Webinar, thank you very much
01:12:21 Patrick Montague: Thank You
01:12:25 Sylvester Major: Thank You!
01:12:26 Angela Tseng: Thank you so much, Mr. Philipp Legner!
01:12:27 Teresa Bulanda: Thank you! Great stuff!
01:12:28 Catherine Anderson: Thank you once again!!
01:12:29 Lisa Priel: Merci beaucoup!!
01:12:30 Marcus Vinícius Pereira: Thank you so much!
01:12:30 Stacy Haines: I have a question. Please
01:12:32 Mark Phipps: Your presentation was so fast and amazing at the same time. I appreciate your passion for math and hope to have more time to interact in the future.
01:12:34 Emerson Roman: ¡Felicidades!
01:12:39 Francis Kisner: Great presentation. Too much to digest in one sitting. Much to study over the summer. Thanks
01:12:40 Sreevelmurugan Vamadevan: Very useful webinar
01:12:41 Aparna Shah: New York!
01:12:45 Danife Palisoc: very informative! Thank you so much!
01:12:47 Jacqueline Slade: Awesome Webinar
01:12:48 Enkelejda Limani: Brooklyn
01:12:49 Janice Magauay: Hello philippines!
01:12:52 Michael Montalla: Salamat from Philippines
01:12:52 Inga Clark: Tasmania!! :-)
01:12:58 Teresa Bulanda: wonderful website!
01:13:00 Portia Felder: How many people in the webinar?
01:13:01 Kevin Agnew: Thank you from Weehawken!
01:13:02 ELLA CABRERA: Thank you!!

Greetings from Philippines!

01:13:02 Sunil Singh: ((Clapping))
01:13:08 dawn geshwender: Incredible! Thank you!
01:13:10 Kathy Iverson: This was positively fabulous!
01:13:10 Chonda Long: 822
01:13:11 Aya Zvaigzne: Standing Ovation
01:13:13 Caitlin Maggi: Raise your hand if you have a questions
01:13:15 Lynda Krivansky: thank you
01:13:15 Jimmy Jam Lyons: Did you read ALL those books, Phillipp?
01:13:17 Jennifer Heldenbrand: Thank you, Philipp!
01:13:21 Beth Kobett: Spectacular!
01:13:30 Noe Eugenio: Great Webinar! Thank you NCTM and Philipp from the Philippines. :)
01:13:44 Marilu Deal: Thank you for such a great presentation! So many fantastic resources.
01:13:53 Sahar Alkhatib: Thank you Philipp. It was amazing. So many ideas.
01:13:54 Leonora Olmos: thank you great information. absolutely loved it
01:13:56 Ramona Bankston: Thank you.
01:14:00 Max Hughes: Thanks
01:14:05 Portia Felder: Thank you for sharing
01:14:06 Norma Zúñiga: Thanks so much! Amazing presentation!
01:14:07 Jennifer Hagman: Thanks again!
01:14:08 Norma Gordon: Thanks!
01:14:09 Darlene Purcell: Thanks!
01:14:12 Christina Tully: Thank you!!
01:14:13 Ann Marie Nee: THANKS
01:14:15 Gloria Flores: Thank You
01:14:15 Charlie DoddSomerton: thumbs up
01:14:15 Büşra Ekizoğlu: thank you from Turkey :))
01:14:18 Eme Grace Suarnaba: thank you so amazing
01:14:21 Steve Breslow: Thank you. Be well, everyone!
01:14:24 Sabrina Nikaghanri: Thanks!
01:14:29 Mary Lisa Pilac: Thank you!!
01:14:30 Amanda Aitken: Thank you!
01:14:30 Caitlin Maggi: Thank you! I enjoyed it
01:14:31 Jaime Pacilio: Gute Nacht
01:14:36 Penina kamina: Ery informative and beautiful
01:14:38 Mariano Cano Santos: Have a nice day from Catalonia!
01:14:40 Denesha Howell: enjoyed
01:14:41 Dave Hankin: Aweome stuff!
01:14:49 Jorge Veloso: Wonderful webinar! Bye bye.
01:14:51 Faith Peddie: philipp@mathigon.org
01:14:56 Mark Phipps: I am going to go play on your site
01:14:57 Karin Keener: Thank you for all that you shared!