

00:53:53 Beth Kobett: We are so happy you are here!
00:54:03 Philip Mojares: Hello! I am Philip Mojares from Somerton, Arizona
00:54:04 Carol Matsumoto: Hi from snowy Winnipeg! Carol
00:54:13 Jessica Hunter: Hi from Monroe, Louisiana!
00:54:14 Lorie Huff: Hello from Fayetteville, Arkansas
00:54:18 Sarah Bush: Thank you for joining us!!
00:54:21 Elaina Fennell: Hi everyone. Elaina from Newfoundland and Labrador
00:54:23 Candice Kumor: Candice from Wichita Falls, Texas
00:54:24 Jorge Haddock: Hi!
00:54:29 Denise Smith: Hello from Roblin, Manitoba
00:54:33 Judith O'Connor: Judith from Floyd VA
00:54:33 Gabby Trojanowski: A socially-distant hello from Brooklyn, NY!
00:54:34 anjana Tihaiya: Hi Anjana Tihaiya From CT
00:54:35 Jorge Haddock: I'm from Orlando, Florida
00:54:37 Herminio Planas: Hello! I'm Tito Planas from Bridgeport, Ct
00:54:38 joseph scauzillo: Hello from Yorktown Heights, New York. Joe
00:54:38 Christina Baldy: Hello from Denver, Colorado
00:54:40 Debra Odle: Debbie from Mesa, AZ
00:54:42 Benjamin Sinwell: Hi from Andeson, SC
00:54:42 Angel Navarro: Angel from Phoenix, Arizona!
00:54:43 michael Lanstrum: Michael Lanstrum from Cuyahoga Community
College in Cleveland, Ohio
00:54:44 Heather Javiel: Hello from London, Ontario
00:54:45 Philip Mojares: Yehey, this is my second time attending this online
seminar. Thank you NCTM for this!
00:54:45 Laura Hapgood: Hi, Laura from Plymouth, MA
00:54:47 Robert Berry: Hi Robert Berry Charlottesville, VA
00:54:48 Danielle Barberi: Hi! Just north of New Orleans, LA
00:54:51 Gina Misiunas: Hi Everyone!
00:54:51 Amy Brunson: Amy - Monticello, Arkansas
00:54:52 Anthony Massimini: Anthony from Mechanicsville, VA
00:54:53 Kathy Welch-Martin: Kathy Welch-Martin from West Lafayette, IN
00:54:53 Daniel Irving: Hello from North Providence, RI.
00:54:56 Jennifer Love: Hello from Bloomington, IL
00:54:56 Suzanna Krutsch: Hey! from Cary North Carolina
00:54:57 Helen White: Hello From Lucasville, Ohio
00:55:02 Madison Tomscheck: Charlotte, NC!
00:55:04 Caroline McCoy: Carrie from Portland, Oregon
00:55:04 Zachary Blankers: Hello from Seattle Washington
00:55:06 Heather Parker: Heather from Chippewa Valley Technical College in WI
00:55:09 Derrick Keister: Hello all, from the great Philadelphia
region!!
00:55:13 Cynthia Sumpter: Hello everyone. Cynthia Sumpter from Red
Springs, NC
00:55:14 Michael Minchella: Hello from Toronto!
00:55:18 Laci Lizarraga: Hello from Richmond, VA
00:55:24 Jenny Sagrillo: Hello from Milwaukee, WI
00:55:24 Jeanne Webb: Jeanne Webb, Staunton, VA
00:55:25 Lisa Harden: Hi from Linden, MI
00:55:35 Ginette Peralta Suarez: Hello from Haslet, TX

00:55:42 Laura Beth Snoop: hi from michigan!
00:55:43 Kristin Stuby: Hello from New Tripoli PA
00:55:45 Andrea Howard: Iowa
00:55:47 David Dai: Happy Thursday from Mobile, Alabama
00:55:51 Jennifer Banks: Howdy from Wyoming
00:55:52 Aimee Timmers: Cincinnati, Ohio
00:55:54 Emma Spencer: Hello from Everett, WA!
00:55:54 W Tad Johnston: Hi, Tad from DC
00:55:55 Josh Harrison: Hi, From Spokane Wa
00:55:55 W Gary Martin: auburn, AL
00:55:56 Candace Heath: Candace from Fremont, CA
00:55:57 Latrenda Knighten: Hello All, from Baton Rouge, LA
00:55:58 Ann Assad: Hi. Ann Assad, Paducah, KY
00:55:58 Nichole Campbell: Hello from Andover, MN
00:55:59 Ryan Kinstedt: Hello from the Oregon Coast
00:56:01 Catherine Vittorio: Catherine Vittorio, San Bernardino CA
00:56:01 Brenda Callaway: Oklahoma
00:56:01 Jolene Peterson: Hello from Kansas!
00:56:01 Patrick Montague: Hello from Weslaco, TX
00:56:01 Susan Robinson: Hello from Salt Spring Island, BC Canada
00:56:02 Shelly Jones: Hi again, LOL Shelly from Hamden, CT
00:56:03 Laura Knight: Indianapolis, Indiana!
00:56:04 Tami Voegeli: hello from South Dakota
00:56:05 Elizabeth Sasse: From Greeley, Colorado. We are having a
blizzard outside!
00:56:05 Carole Bamford: Hi from Montreal, Quebec
00:56:06 Clarissa Rothe: Hello from Daly City, California Math 7th grade
00:56:06 Susie Frieden: Hello from Monmouth, Illinois
00:56:07 Lisa Velazquez: Newville PA
00:56:08 Stephenia Courtney: Hello from Las Vegas-
00:56:10 Suzanne Clemons: Alabaster, Alabama
00:56:11 Keith Setz: Hello from Wisconsin
00:56:11 Denise Banderman: mid-Missouri
00:56:11 Kenneth Yowell: Kenny from Fluvanna again. I love NCTM!
00:56:12 Angela Barnes: Hi from Vancouver, WA
00:56:12 Ellen Manchester: Kerrville, TX
00:56:13 Cindy Bryant: Cindy Bryant,
00:56:14 Thomas Steinfeld: I'm from Brookline NH
00:56:15 Chanel Winstead: Hello from New Jersey!
00:56:16 James Mellody: Hello from Akron OH
00:56:17 Cindy Bryant: Springfield, MO
00:56:17 Kelly Ward: Greetings from Deep East Texas (Angelina National
Forest) [I'll try this again!]
00:56:18 Beth Edwards: Hi from Beth in Hamilton, Ontario, Canada
00:56:18 Beth Cammarata: Hi from Santa Fe, New Mexico
00:56:19 Meg Norton: Hello from Fitchburg, MA
00:56:19 Jaclyn Murray: Hi from Atlanta, GA!
00:56:20 Lynn Rakatansky: Hi! It's Lynn Rakatansky from Providence,
RI.
00:56:21 Katina Odoms: Katina Odoms from Monroeville, Alabama

00:56:22 Lauren McAnany: Hello from St. Marys, PA
00:56:22 Jaque Kampschroer: West Hills – LA Area!
00:56:22 Raena King: Dayton, OH
00:56:23 Ibtissam Chahwan: Boston, MA
00:56:24 Trena Wilkerson: Waco, Texas!
00:56:24 Lybrya Kebreab: Oh. Hi. Lybrya Kebreab Doc student from the
University of Central Florida (Go Knights!!)
00:56:29 Zahra O'Reilly-Bates: Hi...Zahra from St. Croix, U.S. Virgin
Islands
00:56:31 Lisa Sullivan: Palm Desert CA
00:56:31 Rosilind Stevenson: Hello from PGPS MD.
00:56:35 Kristina Grannan: Hello from Evansville, IN.
00:56:36 Cindy Bryant: This is AMAZING!
00:56:41 Mary Dugas: Mary, Lafayette, LA
00:56:43 Anders Alicea: Anders from Baltimore, Maryland
00:56:46 Aicha Weiss: Aicha Weiss from Ramsey, NJ
00:56:47 William Luke: William LUKE CENTRAL TEXAS
00:56:51 Leticia Tucker-Mickle: Hey Lisa, I am in Indio... Close by.
00:57:00 Kelly Ward: @Ginette, where is Haslet TX?
00:57:03 Karen Nelson: Hello from Colorado Springs, Colorado!
00:57:11 Skip Fennell: Skip from Maryland
00:57:15 Angela Gonzalez: Hi from Southern Pines, NC
00:57:42 Kristin Stuby: Where is Maryland Skip?
00:57:46 Lisa Sullivan: Hi Leticia!
00:58:01 Stephenia Courtney: Thank you Chonda for re-opening the Webinar
for today!
00:58:04 William Speer: Bill Speer - UNLV
00:58:28 Benjamin Sinwell: Hi Again Bill!
00:58:28 Barbara Boschmans: Barbara Boschmans, NAU, Flagstaff, AZ
00:58:33 LaToya Lott: Hello from Mississippi
00:58:37 Benjamin Galluzzo: Ben from Potsdam, NY
00:58:38 Jeanetta Glass: Memphis, TN
00:58:39 Courtney Milner: Courtney Milner from Stansbury Park UT
00:58:42 Hilary Kreisberg: Hilary Kreisberg, Massachusetts
00:58:46 Ken Krehbiel: Hi everyone.
00:58:46 Mark Phipps: Mark Phipps - Mesa, AZ
00:58:47 Danita Brown: Hello from Louisiana!
00:58:47 Lori Hower: Hello - Lori from Kansas City area
00:58:48 kelly beirne: Hi from South Jersey
00:58:50 Kathleen Morris: Northern VA
00:58:51 Jesse Casares: Jesse Casares, Salinas California
00:58:51 Sierra Higi: Sierra Higi, Wilmington NC
00:58:52 Christine Telford: Christine Telford-Memphis,TN
00:58:52 Crystal Maginnis: Chrissy Maginnis Charlotte NC
00:58:53 katharine Rasch: Kathe Rasch from NC
00:58:53 Terri McCarthy: Terri From Danbury, CT
00:58:58 Kristin Asa: Hello from Las Vegas
00:58:58 Shannon Nelson: Hello from Shannon Nelson, Plainfield, IL
00:58:58 Cynthia Brunk: Cynthia, from Virginia
00:58:59 Jennifer Harris: Hello from Southern WV

00:59:01 Brian Odiwuor: Hello, Brian from Syracuse
00:59:01 Linda Thommen: Hi everyone from Salem, Oregon!
00:59:01 Michelle Funai: Michelle from Honolulu, HI
00:59:01 Jill Shilling: Jill Shilling - Lakeview School District, Battle
Creek, MI
00:59:01 Tom Santulli: Hi This is Tom from Ramsey, NJ
00:59:02 Marcel Ouellette: From Edmonton, Alberta, Canada. Anyone
further North?
00:59:07 Stacie Parham: Stacie from Dinwiddie, VA
00:59:07 Corryn Burlew: Hi! Corryn from Delaware
00:59:08 Dewey Gottlieb: Dewey Gottlieb here. Aloha from Hawaii!
00:59:10 Rebecca Capizzi: Rebecca, New Jersey
00:59:10 Emily Kavanagh: Hi from Columbia, MD
00:59:13 Joel Hermansen: Joel from Vermont
00:59:14 Gabriela Castro: Gabriela Castro,
00:59:17 Sue Bankonin: Sue Vancouver, Canada
00:59:19 Jill Skintges: Hi from Chicago
00:59:21 Hong Pun: Hong from San Jose, California
00:59:23 Cheryl Chanaiwa: Cheryl, MaryLAND
00:59:25 Connie Brown: Hi from Mansfield Ohio
00:59:26 DeAnn Huinker: Hello everyone! DeAnn from Milwaukee. Ready to
learn.
00:59:30 Gabriela Castro: Oklahoma
00:59:46 Linda Furuto: Aloha! Linda Furuto from Hawai'i
00:59:48 Joy Oslund: Hi from Michigan!
00:59:51 Alina Stefanov: Hello, this is Alina from UCF, ORlando, FL
00:59:54 Reena Nancy: hi
01:00:09 Faith Peddie: Your mics are muted!!
01:00:18 Kristy Allen: Hello from Cape Coral, FL
01:00:20 dana dulzo: hi from michigan
01:00:55 I T: Hi all, Ian Thomas from Port Alberni, BC CANADA
01:00:59 Patty Blair: Patty Blair St Tammany Public Schools Slidell,
Louisiana
01:01:10 Natalie Jackson: Hello from Ontario, Canada :)
01:01:18 Jennifer Suh: HI all from Virginia
01:01:34 Joanne Speaks: Hello from Virginia
01:01:42 johanna RACIOPPO: hello from Charleston, SC
01:01:52 Terri Davis: Hi from Richmond VA
01:02:07 Ann Cola: Hello from NYC
01:02:25 Anne Montreal: Hi from Syracuse, NY
01:02:34 Cindy Cravens: Cindy from Missouri
01:02:36 Amy Goodman: Hi from Annapolis Maryland :)
01:02:43 Rachelle Wright: Hello from Keysville, VA
01:02:56 Chonda Long: The recording will be available tomorrow afternoon
at www.nctm.org/100
01:02:59 Emily Kavanagh: Hi Amy
01:03:06 Meaghan McIntyre: Hi from Cumberland, Rhode Island
01:03:11 Chonda Long: I will also provide a link to a certificate of
participation at the conclusion of the webinar
01:03:13 Amy Goodman: Hi Emily

01:03:42 Leidiana Kumar: Hi, from Mrs.Kumar in New Jersey.
01:03:59 Leticia Tucker-Mickle: Recording will also be available on the NCTM
FB page right?
01:04:03 Chonda Long: Yes
01:04:04 Benjamin Galluzzo: Dr. Nina Fefferman at NIMBioS gave a really
nice and accessible epidemiology talk recently that can be found at
<http://www.nimbios.org/webinars>
01:04:05 Shakiyya Bland: Thank you, Chonda
01:04:44 Stephenia Courtney: I miss your classes Dr. Shih!
01:05:47 David Barnes: Here is the link to the NSTA free webinar on the
science of COVID-19
01:05:50 David Barnes:
<https://common.nsta.org/resource/?id=10.2505/9/WSNSTA200325> -
01:06:08 Stephenia Courtney: Thank you David
01:06:12 Raul Menjivar: Thank you for the link
01:06:17 Latrenda Knighten: Thanks, Dave!
01:08:06 Chonda Long: Do you have a question?
01:08:35 Lybrya Kebreab: I love the heart earth <3
01:09:16 Shelley Hunter: Here a link to a great PBS video about the math of
#stayathome. There's also a follow-up video on the science of #washyourhands
<https://www.pbs.org/video/what-this-chart-actually-means-for-covid-19-ybsbtd/>
01:11:14 Jennifer Suh: Sure! Students have to make assumptions and think
quantitatively as they are thinking about spending the happiness
01:11:24 Chonda Long:
<https://www.nasponline.org/resources-and-publications/resources-and-podcasts/school-climate-safety-and-crisis/health-crisis-resources/helping-children-cope-with-changes-resulting-from-covid-19>
01:11:25 Emmanuel DelMundo: do we have permission to use the link for
our class? to have students discuss and see the math
01:12:08 Hilary Kreisberg: what great ideas!
01:12:08 brenda moser: foot tap greetings
01:12:20 Lybrya Kebreab: Air high 5s
01:12:27 Cindy Bryant: Love these ideas!
01:12:45 Stephanie Simon: Great ideas!
01:12:54 Faith Peddie: Fantastic ideas Beth!
01:13:07 Judith O'Connor: NONE in our stores!
01:13:33 Leticia Tucker-Mickle: LOL! Love it!
01:13:41 Jennifer Suh: Hmm... what assumptions do you have to make? HAHAAH
01:13:45 Cindy Bryant: Very real life right now!!!
01:13:53 Tricia Bowling-Bryant: AWESOME
01:14:02 DeAnn Huinker: Love the toilet paper idea! How long with our toilet
paper last?
01:14:08 Leslie Sorace: LOL, not now with the truck that dumped all of it:(
01:14:21 Beth Roark: Thanks for giving us some cool easy ideas to use
Math in these weird times. Also, easy enough for younger kids.
01:14:21 Lybrya Kebreab: It worked! :)
01:14:24 Diane Anderson: I love this!
01:14:27 Chonda Long: Do you have a question?
01:14:46 Jeff Shih: We learned a lot about toilet paper
01:15:05 Ann Cola: love your suggestions

01:15:06 Barbara Boschmans: :-)
01:15:19 Jessica Hunter: Ya'll need to buy some scott's 1000 sheet roll. 1
roll last all week for 2 people!
01:15:30 Jeff Shih: Hi Vegas people!
01:15:51 Kristin Asa: Vegas! :-)
01:16:03 Skip Fennell: Great stuff Jeff and Beth
01:16:13 Clarissa Rothe: The man has a disc around him
01:16:19 Benjamin Sinwell: Radius or diameter
01:16:19 Gabby Trojanowski: How wide is your disc?
01:16:19 Melissa Luzano: How heavy is that?
01:16:21 Lorie Huff: What is he standing in?
01:16:24 Kansky Kansky: I wonder if this is our future
01:16:24 Natalie Jackson: What are the dimensions?
01:16:24 Cheryl Chanaiwa: The man is at the center of the circle.
01:16:24 Christina Baldy: What is the radius of the circle?
01:16:24 Linda Thommen: Clever guy.
01:16:24 Denise Banderman: in the middle of a table?
01:16:25 W Tad Johnston: is it really 6 feet radius
01:16:25 Ashley Levy: radius is not 6ft
01:16:26 Cheryl DuFour: The chair is in the middle of the table.
01:16:27 Beth Roark: How do I get one of these? :)
01:16:28 Reena Nancy: why is there a disc
01:16:28 Paula Santana: Looks like 3 feet radius
01:16:28 Katina Odoms: Why is he in the middle of the disk
01:16:28 Joy Oslund: He's at the center.
01:16:28 Barbara Boschmans: Diameter?
01:16:28 Laci Lizarraga: He's enforcing that 6 feet minimum
01:16:29 Jesse Casares: Seems to be having a good time
01:16:29 Anthony Massimini: how heavy is it
01:16:29 Mark Phipps: Is he wearing pants
01:16:30 Kelly Ward: Radius?
01:16:30 Beth Edwards: The picture is taken from farther away
01:16:30 David Dai: I wonder what the radius is?
01:16:30 kristen grasso: 6 feet
01:16:31 Michelle Funai: I've been there!
01:16:31 PAVNEET BHARAJ: Wonder if this is exact 6 feet in radius?
01:16:31 Jeanetta Glass: The man is in a hole
01:16:31 Katherine Garcia: I notice there is a disc for social
distancing. I wonder if it is 6 ft in radius.
01:16:31 Angela Gonzalez: What in the world happened?
01:16:32 Shelly Jones: What is the circumference of the disk
01:16:32 Leslie Sorace: I wonder if it is 6ft
01:16:32 Stephenia Courtney: the distnce
01:16:32 Tricia Bowling-Bryant: HE LOOKS CONFUSED
01:16:33 Cynthia Brunk: He's social distancing
01:16:34 Nichole Campbell: Is the radius 3 feet
01:16:34 Raul Menjivar: the disc give him equidistant from everyone
01:16:34 Deborah Chapdelaine: where did he get that large of a piece of
cardboard
01:16:34 Emmanuel DelMundo: Is the disk around him at least 6ft

01:16:34 Jolene Peterson: I wonder the radius or diameter of the disc.

01:16:35 Jennifer Harris: great way to show his personal bubble

01:16:35 Cheryl DuFour: Maybe he is standing.

01:16:36 Shelley Hunter: I wonder how much this thing weighs and how he got
to where he is

01:16:36 Zachary Blankers: What is the radius?

01:16:37 W Tad Johnston: looks like less than 6 feet to me

01:16:37 James Mellody: Is the radius bigger than 6 feet

01:16:37 Shakiyya Bland: What is the disc made of?

01:16:38 Stephenia Courtney: distance

01:16:38 Anthony Massimini: how much does it cost

01:16:39 Lori Hower: what size is the inner circle?

01:16:39 Michelle Grover: is the radius 6'?

01:16:39 Farshid Safi: fixed distance from a point/person

01:16:40 Kelly Ward: What do the words mean?

01:16:40 KellyAnn Allen: Is it heavy?

01:16:43 Shari Kaku: Is the disk Flexible

01:16:43 Jennifer Gailey: Is he wearing a model toilet paper roll?

01:16:44 Candice Kumor: He will not fit through a doorway

01:16:45 Christina Baldy: How can he get through doors?

01:16:45 Herminio Planas: I wonder if he is trying to find out how far
people have to stand?

01:16:46 Clarissa Rothe: did he walk

01:16:46 LaKeasia Hammond: no one is in arms length

01:16:47 Anthony Massimini: can I break it?

01:16:47 Shelly Jones: How did he make it?

01:16:48 Ann Cola: the people in the back are not social distancing

01:16:48 Leticia Tucker-Mickle: Is it 6 feet from the cent of the hole or
from the hole?

01:16:49 Tricia Bowling-Bryant: YES

01:16:50 brenda moser: social distance

01:16:52 Jeanetta Glass: I wonder how he got in there

01:16:52 Crystal Harris: Wouldn't his disk get contaminated?

01:16:52 Lorie Huff: Is he strapped down?

01:16:53 Mark Phipps: Do they make a slender size

01:16:54 Lybrya Kebreab: What does the bottom look like?

01:16:55 Diane Anderson: Can the disk break

01:16:57 Amy Brunson: Notice the edge is the same distance from him all
the way around.

01:17:03 Malgorzata Kaczynski: what's the area of the disc

01:17:06 Farshid Safi: 6 or at least 6 feet?

01:17:07 Elizabeth Zhang: He's close in one picture and not in the
other

01:17:08 Baron Hannsz: Would I look fat in that?

01:17:09 Leidiana Kumar: He has his own space.

01:17:09 Lisa Harden: What is the radius?

01:17:12 Philip Mojares: Social distancing?

01:17:12 Benjamin Sinwell: Scale factor of between the 2 pics

01:17:19 Raul Menjivar: He is in a marketplace

01:17:22 Chonda Long: Make sure to type your answers to panelists and attendees

01:17:23 Leticia Tucker-Mickle: How big is the disk?

01:17:31 Kimberly Schott: What's the area of the circle? What's the area of the cutout in the middle?

01:17:31 Joanne Speaks: I wonder if it is heavy

01:17:34 Cheryl DuFour: Only if his radius is about 6 feet.

01:17:39 Cindy Cravens: how many people bumped into his disk?

01:17:44 Emmanuel DelMundo: I wonder how many other people with the same contraption would fit at the grocery store

01:17:45 Jill Skintges: It was 3 feet distance at the time of the photot

01:17:46 Mark Phipps: I think they made this when we talked about staying 3 feet apart a while ago

01:17:46 Kelly Ward: Ohhh, how did he get through the door is a GREAT questions!

01:17:49 Anthony Massimini: Need to have bigger doorways

01:17:55 Peter Anderson: Can he get through a door?

01:17:56 Latrenda Knighten: How would you get through the door?

01:18:29 Jennifer Hagman: can you fit down a grocery aisle to get your toilet paper when you wear that?

01:18:33 Lybrya Kebreab: Nice.

01:18:47 Cindy Bryant: Good question Jennifer Hagman!

01:18:47 Suzanna Krutsch: we were told no gatherings of 50 or more, but we kept having school for about a week. How many kids do you think are in the cafeteria?

01:18:48 W Tad Johnston: Can you reach the toilet paper?

01:18:50 Elizabeth Zhang: I notice that the bigger kids get, the less classroom space they have!

01:18:51 Peter Anderson: Wow the bigger the kid the smaller the classroom

01:18:52 Gabby Trojanowski: The youngest kids need the most room

01:18:53 Christina Baldy: What about the length and width to get that area?

01:18:57 Angela Gonzalez: the seal is super big!

01:18:57 Deborah Chapdelaine: the older kids have less space

01:18:57 Elizabeth Ruiz: Why do the little kids get the biggest classrooms?

01:18:58 Cheryl Chanaiwa: The rooms get smaller as the kids get bigger.

01:18:59 Emmanuel DelMundo: who came up with these numbers

01:18:59 Anthony Massimini: Elementary has more sq ft

01:19:01 Kelly Ward: Do the dimensions make a difference to how many can fit?

01:19:03 James Mellody: does not have class size.

01:19:03 Jennifer Harris: They are different - but older kids are larger and allow more per class

01:19:03 Christina Baldy: Could you have a room that is really long and skinny?

01:19:04 Kristin Benedict: Kids get bigger room gets smaller

01:19:04 Farshid Safi: what are the assumptions about class size?

01:19:04 Lori Hower: why k-3 have more room with smaller kids?

01:19:05 Faith Peddie: This is so creative, Dave!

01:19:05 Ashley Levy: not alot of room per kid

01:19:06 Laci Lizarraga: I'd have to divide by 36, which means less people than we think

01:19:06 Shelley Hunter: Bigger square footage due to bigger class size or more activity?

01:19:07 Shakiyya Bland: How many students in each classroom?

01:19:07 Leslie Sorace: I wonder how we will ever be able to have 42 students in a classroom anymore?

01:19:07 Leticia Tucker-Mickle: What dimension would give the maximum space?

01:19:07 April Thompson: Not much a change for middle and high even though the children are bigger.

01:19:09 W Tad Johnston: The bigger you get, the smaller the room

01:19:09 Stephenia Courtney: footage gets smaller with the more student

01:19:09 Baron Hannsz: Is there one for every state?

01:19:09 Lybrya Kebreab: I notice the HS have the smallest amount. I wonder why the biggest kids need least space?

01:19:09 Kansky Kansky: Seems small

01:19:10 Kristin Asa: Why when kids get bigger do they have less space?

01:19:10 Paulette Del Rosso: Little kids move around more?

01:19:10 Anthony Massimini: with the smaller kids

01:19:12 Meaghan West: Why are the elementary classrooms bigger?

01:19:15 Pamela Gavina: At my school, there are more students in 4-8 classrooms than K-3!

01:19:15 Ann Cola: smallerclassroom for bigger kids

01:19:15 dana dulzo: how many circles fit in a square room?

01:19:16 Jeanetta Glass: why do numbers get smaller as the students grow

01:19:17 Cindy Bryant: Exactly!

01:19:17 Tricia Bowling-Bryant: LITTLE KIDS TAKE UP LESS SPACE

01:19:19 Katherine Garcia: I wonder if they specify a maximum number of kids per room.

01:19:21 Suzanna Krutsch: they think that big kids just sit

01:19:21 Christi Edwards: Why are the big students in small rooms???

01:19:21 Diane Anderson: how many students in the class

01:19:22 Stephanie Simon: Elementary students have more space.

01:19:23 Kelly Ward: The HS students sleep...they don't move.

01:19:23 Jolene Peterson: I notice the minimum square footage decreases as you increase student grade level.

01:19:29 Cheryl DuFour: Little kids have trouble staying in their space. They have mats.

01:19:31 Latrenda Knighten: Big kids have desks and smaller kids have tables

01:19:32 Laci Lizarraga: Are there more kids in Elementary classrooms?

01:19:40 Beth Cammarata: K-3 move around more and they're in there all day!

01:19:43 Elizabeth Ruiz: And there are less kids in a class when they are in Elementary!

01:19:46 Kansky Kansky: The old thinking was that kids don't move as much as they get older

01:19:48 Kristi Miller: why does area decrease and class size increase as kids get older?

01:20:03 dana dulzo: how can the teacher walk around the room?

01:20:05 Cheryl DuFour: Older kids don't move around as much as younger kids.

01:20:14 Kelly Ward: AND you have to think about walking past other students as you enter the room.

01:20:18 Leticia Tucker-Mickle: How many 7 foot circles fit in the rectangle?

01:20:28 Stephanie Simon: The teacher would have to stand still.

01:20:45 Lybrya Kebreab: Super cool!

01:21:01 Christi Edwards: Love this

01:21:02 Tricia Bowling-Bryant: I LOVE IT

01:21:06 Cindy Bryant: Nice visual.

01:21:14 Christi Edwards: Good point!

01:21:17 Leslie Sorace: Smart!

01:22:09 W Gary Martin: cool

01:22:27 Tiffany King: I have been trying to do this with a Wal-Mart. The numbers I am getting seem unrealistic though. Our Wal-Mart is still full of people.

01:22:53 Mark Phipps: It seems like you'd need about 8 feet clear to walk down the middle to maintain distancing.

01:23:17 Lybrya Kebreab: Hi Dr. Bush!!!

01:23:18 Lorie Huff: Great ideas!

01:23:18 Cindy Bryant: Hi Sarah

01:23:23 Tiffany King: Hello!

01:23:26 Paula Santana: Hi, Dr. Bush!!!

01:23:27 Stephenia Courtney: Hello!

01:23:27 W Tad Johnston: the model forgets the diameter of the person

01:23:39 Diane Bender: hello

01:23:45 Raena King: Stores need to do IKEA and have only one direction you can go. And then you forget one thing and have to ReWalk the entire store

01:24:28 Elizabeth Zhang: That is a good Question

01:24:31 Tiffany King: lol, I found that a super store Walmart is 179,000 square feet.

01:24:43 Cynthia Sumpter: Density problems will need to be redefined in high school Math 3 when considering social distancing

01:24:46 Tiffany King: It is not all walking space though

01:24:53 April Thompson: These are so great. Thanks!

01:25:32 Lybrya Kebreab: The "M" in STE(A)M!! Not just using rulers. Love it!

01:26:03 Tiffany King: Yes, I teach Geometry and density is something we haven't discussed. I need to work this out because I think it would be a good discussion right now.

01:26:38 Lybrya Kebreab: Absolute v. Relative thinking in MS is HUGE! Thank you for this Dr. Bush!

01:27:37 Sandhya Raman: Wonderful connections.

01:28:46 Jill Skintges: Are any of these tasks available in Spanish?

01:29:05 Farshid Safi: Thank you Dr. Bush for illustrating the importance of comparisons to gain perspective and emphasize relative vs. absolute mathematical explorations

01:29:22 Leticia Tucker-Mickle: These sounds like great questions, the application is amazing. However, I wonder how looking at these numbers might scare some students.

01:29:26 Kansky Kansky: I like the comparing the states idea- kids will like

that

01:29:44 Kelly Ward: And we could connect it to the population density of those states.

01:30:23 Ashleigh Walton: This site has world wide info and each country with sources <https://www.worldometers.info/coronavirus/>

01:30:41 Herminio Planas: are these slides available somewhere?

01:30:52 Candace Heath: I think it would be really good to teach students how to create the graphs.

01:31:02 Faith Peddie: The slides will be available tomorrow on www.nctm.org/100

01:31:04 Candace Heath: Also, talk about why different sources of data might have different numbers

01:31:22 Chonda Long: A recording and a link to all of the resources will be available tomorrow on www.nctm.org/100

01:31:35 Christina Baldy: Why is the new cases more up and down?

01:31:37 Kelly Ward: Will it stay exponential? What would that mean?

01:31:40 Brenda Callaway: Total cases is a smooth curve, new cases has some up and downs.

01:31:47 James Mellody: I have been tracking the log graph which is even more interesting.

01:31:51 Paula Santana: The graph starts to grow after day 15

01:32:00 Patrick Montague: every 4th day number of new cases drop

01:32:06 Tricia Bowling-Bryant: NOTICE NEW CASES ARE SCATTERED A BIT

01:32:22 Mark Phipps: Weekend reporting seems inconsistent

01:32:34 Philip Mojares: there is a positive association

01:33:01 Keith Setz: Are the number of new cases lower on a particular day (higher/lower on a Monday, etc.)

01:34:08 Cindy Bryant: Thanks Sarah!

01:34:15 Anthony Massimini: 99.9% increase from Feb 29 to March 31

01:34:21 Paula Santana: Thank you Dr. Bush! Great activities.

01:34:24 Stephenia Courtney: Thank you Sarah!

01:34:24 I T: Thanks Sarah

01:34:36 Sandhya Raman: Sarah- thanks! winderful

01:34:39 Leticia Tucker-Mickle: I teach high school, but I am still thinking about kids looking at these numbers and getting scared. Is it just me?

01:34:55 Candace Heath: Does anyone have a source of data that gives you raw numbers over time? Most websites update their numbers daily and I can't go back and see what the numbers were on a previous date.

01:35:06 Laci Lizarraga: One of my seniors modeled COVID 19 for her IA. She said it helped her make sense of things

01:35:08 Raena King: It is scary. But it is also serious and relevant.

01:35:24 Philip Mojares: Scary but leads to awareness

01:35:26 Suzanna Krutsch: I think Johns Hopkins has a site with the raw numbers

01:35:27 Mark Phipps: @candance I do, message me

01:35:45 johanna RACIOPPO: It is so scary

01:36:17 Candace Heath: @mark...sorry, how do I message you individually?

01:36:24 Mark Phipps: You can pull the country numbers from the variety of graphs on this site: <https://www.worldometers.info/coronavirus/country/us/>

01:36:35 Lybrya Kebreab: The children need to hear the age-appropriate truth.

01:36:37 Judith O'Connor: great!

01:36:40 Mark Phipps: I just didn't want to lose your name as the chat goes fast sometimes

01:36:57 Candace Heath: thanks!

01:37:27 Cheryl Chanaiwa: "All mathematical representations are a caricature of reality." Yes!!!!

01:37:34 Kelly DiLeo: you should consider the degree of reality your students are ready for

01:37:36 Chonda Long: Participants at all grade levels are welcome in this webinar

01:37:50 Jennifer Hagman: @Lybrya - agree!

01:38:05 Christopher Lewicki: I have found this to be an excellent webpage for up-to-date COVID-19 data: <https://coronavirus.jhu.edu/map.html>

01:38:53 Mark Phipps: Recovered or perhaps removed from the infectible pool

01:39:10 Lybrya Kebreab: Thanks @Jennifer. Really believe NOT telling the truth has cause too many casualties in this pandemic already. :(

01:39:14 Skip Fennell: The Johns Hopkins site just noted is updated regularly and allows many different views - by state, country, etc.

01:39:20 Lybrya Kebreab: *caused

01:39:25 Candace Heath: @lybrya I agree

01:40:42 Mark Phipps: The jhu map started to falter under the updates. However, it is an amazing source to relearn your world geography and is extremely visual. The worldometer site has graphs and data. The table can be sorted and the graphs have mouseover features. It is a fascinating wormhole.

01:40:42 Candace Heath: I personally think if we can't talk to about this with high schoolers, especially juniors and seniors, they'll never be ready for the real world...and they won't be prepared to make responsible decisions.

01:41:01 Lybrya Kebreab: Making slope a "real thing" sad, but necessary.

01:41:04 I T: Don't for I = recovered AND those who DIE!

01:41:07 Leticia Tucker-Mickle: I bring up students being scared, wondering how to talk about the math and have students feel empowered rather than scared.

01:41:15 Mark Phipps: And the math is cool, but what it represents is a BIG topic for younger and some older minds

01:41:34 LaKeasia Hammond: Are there any ALGEBRA 1 specific resources?

01:41:38 I T: Better make it explicit that some recover and some die

01:42:03 Lybrya Kebreab: Kinder-2 teachers are the best at talking about big people problems in little humans' language.

01:42:33 Mark Phipps: I saw some great work where they assumed that infected people could no be reinfected for either of two reasons, death or immunity developed. Not sure if that is true about reinfection.

01:42:38 Sarah Bush: Leticia, I completely agree it is scary (I am completely terrified). I think it all goes back to knowing your student. What can you do that is meaningful, empowers students, prepares them as future informed members of a democratic society, pushes their thinking, but still does more good than harm. We've shared lots of ideas, but you know what your students' needs best.

01:42:49 Jennifer Hagman: @Leticia - I think the empowerment comes from 1) adults treating students like capable individuals of the hard facts, 2) realizing that there are some things within our personal control we can do to change

the curve

01:43:03 Candace Heath: I think talking about it and helping them realize that they have a way to participate in being the solution to the problem by social distancing can help address fears. It's not like there's nothing we can do. By making responsible choices the models suggest we have the power to "flatten the curve"

01:43:10 Lybrya Kebreab: Agree @Jennifer

01:43:18 Jennifer Hagman: well said, @Sarah

01:43:20 Lybrya Kebreab: Our mathematical goal is to make it less than 1.

01:43:22 Lybrya Kebreab: Nice

01:43:25 Devroy McFarlane: These can be explained without using ODEs. Algebra is enough. High schoolers really only need to know about slopes to grasp most of the concepts here.

01:43:32 Kelly DiLeo: I work with student who are emotional fragile. I think it is important, at this point to be aware of the students mental health.

01:43:35 Leticia Tucker-Mickle: Appreciate the responses. Thank you.

01:43:55 Emily Kavanagh: I like this example

01:43:58 Mark Phipps: They have a plot for this on worldometer. It dips below one on the weekends only right now.

01:44:17 Lybrya Kebreab: I love that the variables are clearly defined and discussed here.

01:44:37 David Barnes: <https://www.nctm.org/tools/pandemic2020/index.html>

01:44:37 Diane Anderson: I like this example

01:44:38 Tricia Bowling-Bryant: SUPER

01:45:08 Mark Phipps: Thank you for the link

01:45:28 Diane Anderson: great...thanks for the link

01:45:31 Stephenia Courtney: Although it is complex, the variables make it simple.

01:45:40 Ann Cola: so important to write equations with words then use variables

01:46:25 Sarah Bush: Dan this is so wonderful!

01:46:28 Devroy McFarlane: R_0 is also sometimes denoted as the average number of secondary infections passed by a typical infected individual.

01:46:30 Lybrya Kebreab: @Ann agree.

01:46:31 Amy Brunson: Have students look at the plots on this site in portrait and then in landscape. This can lead to a lot a good discussion comparing graphs. <https://coronavirus.jhu.edu/map.html>

01:46:46 Stephenia Courtney: Agreed Ann Cola. You are SO right!

01:47:02 Lybrya Kebreab: Also, why do we use beta for slope in Stats and mu in MS? Anyone know?

01:47:52 Lybrya Kebreab: We could make this reduction more clear using dynamic software and the idea of volume??

01:47:53 Chonda Long: The chat will be provided as a PDF

01:48:00 Chonda Long: It will accompany the recording

01:48:38 Tiffany King: mu is mean for pop in stats

01:48:40 Kelly Ward: Because mu is population mean in stats

01:48:46 Lybrya Kebreab: Ohhhhh

01:48:58 Faith Peddie: @Denika - This section is focused on higher grade levels but check other activities for 6th graders using the link <https://www.nctm.org/tools/pandemic2020/index.html>

01:48:59 Stephenia Courtney: WOW!

01:49:02 Mark Phipps: Changing the probabilities and looking at simulations is nicely presented in this video:
https://www.youtube.com/watch?v=gxAa02rsdIs&feature=emb_logo

01:49:12 KaYin Leung: agree

01:49:27 Lybrya Kebreab: Thank you. Seems like something we should explicitly teach especially for students whose first language is not English. Thanks all

01:49:42 Leticia Tucker-Mickle: #MathSaysStayHome

01:49:47 KaYin Leung: thanks a ton

01:49:48 Jennifer Hagman: wow - this visualizations of those R-0 make it really clear why we need to stay home!

01:50:04 Sandhya Raman: Soooo cool...

01:50:04 KaYin Leung: yes, please stay home

01:50:11 Lybrya Kebreab: @Leticia Yup.

01:50:16 Cindy Bryant: Amazing visuals and illustration!

01:50:28 Faith Peddie: Dan, this is so informative!

01:50:30 Lisa Harden: Love tell

01:50:39 Stephenia Courtney: Thanks for all links EVERYONE!

01:50:40 Lybrya Kebreab: He is making the "Why?" Super clear.

01:50:46 Jennifer Harris: this was a great way to visualize this

01:50:51 Virginia Hill: yes! good to share with students and adults

01:50:52 Tricia Bowling-Bryant: YOU NEED TO TAKE THIS ON THE ROAD!

01:51:01 Lisa Harden: Love telling people to stay home.

01:51:01 Chonda Long: Certificate can be accessed here -
www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/100-Days-Certificate-2020-04-02.pdf

01:51:06 KaYin Leung: thanks

01:51:07 Lybrya Kebreab: Thank you!!

01:51:09 Faith Peddie: <https://www.nctm.org/tools/pandemic2020/index.html>
Here is a link to the applet @Baron

01:51:10 Leticia Tucker-Mickle: Loved it Dan!!!

01:51:12 Cindy Bryant: Thank you Dan@

01:51:15 Patricia Stilts: Wonderful! Thank you!

01:51:17 William Speer: Fascinating presentations

01:51:18 Chonda Long: Certificate:
www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/100-Days-Certificate-2020-04-02.pdf

01:51:20 C. Robertson: That was excellent!

01:51:22 Sandhya Raman: Thank you Dan!

01:51:26 Sarah Bush: Yes @Lybrya

01:51:28 Shelly Jones: Thank you to ALL the presenters. Wonderful.

01:51:28 Barbara Scierka: Dan, that was wonderful! Thank you!

01:51:29 Beth Roark: Thank you! This was very helpful.

01:51:31 Leslie Sorace: Thank you!

01:51:31 W Tad Johnston: thanks to the presenters

01:51:33 Jennifer Harris: very informative - thank you

01:51:37 Terri Davis: I'm an elementary school teacher, and didn't understand all the math, but I understood enough! Thank you!

01:51:37 Cherie Larson: That was very informative!!

01:51:39 W Gary Martin: really nice, Dan!

01:51:41 Skip Fennell: Really nice, Dan

01:51:43 Helen White: This has given me so many engaging ideas all I can say is THANK YOU!

01:51:44 Candace Heath: Thank you! Great presentation and lots of good ideas =)

01:51:46 AM Hohman: Great presentation, thank you!

01:51:47 Corryn Burlew: So informative and helpful! Thank you to all the presenters!

01:51:48 Alison Fisher: This has been wonderful - thank you to all the presenters. So informative!

01:51:53 Cheryl Chanaiwa: This was amazing!

01:51:58 Trena Wilkerson: Excellent ideas to consider and mathematical activities to explore!

01:52:04 Farshid Safi: Loved the focus and order of the presentations humanizing, informative and using mathematics to impact our lives, and our schools!

01:52:05 Lybrya Kebreab: I am so grateful to have been here.

01:52:05 David Dai: Phenomenal work! Thank you for sharing!

01:52:08 Daniel Irving: Thank you for sharing this incredible presentation with all of us!

01:52:08 Terri Davis: Thank you all for all of your preparation!

01:52:14 LaKeasia Hammond: THIS IS AWESOME ...Thank you

01:52:14 Mike Shaughnessy: Dan, that was terrific, for such a quick presentation!

01:52:15 Cindy Bryant: #bettertogether

01:52:16 W Gary Martin: present on CNN!

01:52:19 Tiffany King: This was really great. I am so happy about tp data.

01:52:21 Skip Fennell: thank you all.

01:52:21 Stephenia Courtney: AMAZING!

01:52:31 Anthony Massimini: Very informative I enjoyed this, especially the R-0

01:52:32 Kathleen Morris: This was outstanding! I work with K-2 teachers and have so many ideas to share with them for rich tasks they can share with their students during this Home Learning time!! Thank you!!!!

01:52:33 Cheryl DuFour: Can we have access to the slides and questions for our use with our students?

01:52:34 Barb Everhart: This is amazing. Thank you for helping me better understand. I am excited to share with my teachers.

01:52:35 Philip Mojares: Great!

01:52:43 Yolanda Rico: Great presentation!

01:52:47 Beth Roark: Can't wait to share these examples with my 2nd Graders.

01:52:51 Susie Frieden: Thanks for all you've shared

01:52:58 Mark Phipps: Amazing stuff. How are you deciding where to start with numbers with every location in the world being in a different part of the process of infection / recovery and the duration being so hard to pin down?

01:52:58 Kelly Ward: Maybe politicians and advisors can access the NCTM app!

01:53:03 Paula Santana: Thank you!

01:53:05 Emily Kavanagh: Thank you for this informative webinar!

01:53:18 Laura Beth Snoop: where is the link again to get the

certificate?

01:53:18 David Barnes: App is at
<https://www.nctm.org/tools/pandemic2020/index.html>

01:53:19 Densie Pasquale Gagliardi: can we have access to this presentation after the webinar? I would love to share with my team.

01:53:20 Jill Skintges: I've been wondering how they figured R naught, thx!

01:53:21 Sandhya Raman: This should have been on TV

01:53:32 Jennifer Hagman: amen @Kelly Ward!

01:53:37 Brian Odiwuor: Thanks for the great presentation, highly appreciated!

01:53:38 Kathy Welch-Martin: This is great! Started this yesterday... Will be using this next week. Indiana announced that we would be closed for face to face for the rest of the year.

01:53:38 Carol Matsumoto: Thanks everyone!

01:53:43 Joanne Speaks: Thanks!

01:53:49 Meaghan McIntyre: Nice presentations!

01:53:50 Philip Mojares: This should be broadcasted all over the world

01:53:53 Heather Parker: ty!

01:54:01 Chonda Long:

www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/100-Days-Certificate-2020-04-02.pdf

01:54:01 Terri McCarthy: Great Job!

01:54:07 Brittany Johnson: Thank you this was great!

01:54:13 Diane Anderson: This was wonderful....great presentation

01:54:13 Laura Beth Snoop: thanks!

01:54:18 Rosilind Stevenson: Thank you will help me think how I can use for Pre.Kgn! Rosilind Stevenson-PGCPS

01:54:20 Lorie Huff: Great tasks and information, NCTM team! Thank you Chonda Long, Dave Barnes, Jeff Shih, Beth Kobett, Sarah Bush, and Dan Teague! Very relevant! :)

01:54:27 Stephenia Courtney: Thank you for your enlightenment!

01:54:28 Kristin Stuby: How is the availability of testing kits affect the curve and the numbers? Is that taken into account? Does it need to be?

01:54:36 Mark Phipps: Farmland does sound okay if you're well stocked and self-sufficient

01:54:39 Lybrya Kebreab: Assuming everyone is the average person is an important assumption to examine after the digging into the data. What does it mean to be the "average person" in the US? China? Italy? Love it

01:54:43 Philip Mojares: NCTM, thank you!

01:54:45 Tricia Bowling-Bryant: COULD I USE THIS IN ELEMENTARY SCHOOL 4TH GRADE?

01:54:47 C Glover: Excellent presentation. Will definitely share with my high school students!

01:54:49 Herminio Planas: Outstanding presentation. I loved the fact that you can apply every piece of the presentation to your students right away! It also has great insight for continuing to think upon more lessons that can be made up!!

01:55:17 Mark Phipps: It feels like identifying the type of change in the numbers can be used at almost any level.

01:55:18 Alessandra King: Thank you, this is really useful.

01:55:32 KaYin Leung: yes, very useful
01:55:37 Vicki Hughes-Hung: Thank you!
01:55:38 Katie McCulloh: Thanks, all! This was very helpful.
01:55:38 Farshid Safi: Thank you ALL! Very informative and appreciate the personal nature of the presentations!
01:55:44 Cheryl DuFour: Thank you.
01:55:49 Beth Cammarata: Thank you all, this was awesome and useful.
01:55:53 KaYin Leung: great
01:55:57 Shannon Nelson: I like your answer that this data is presented for "a range" of people to understand. Sounds reasonable and intelligent. Thank you much for your time and efforts. This was a fantastic presentation.
01:56:03 DeAnn Huinker: www.nctm.org/100
01:56:06 Tami Voegeli: thanks so much
01:56:09 Leslie Texas: Loved this presentation. Thank you so much!
01:56:10 Leticia Tucker-Mickle: www.nctm.org/100
01:56:11 Marty Beck: Thank you!
01:56:16 Kimberly Schott: Thank you!
01:56:26 Heather Parker: yes!
01:56:30 Jeanne Webb: Thank you all! This was a very informative webinar!
01:56:31 Jesse Casares: Thank you for the resources. I appreciate the ideas.
01:56:32 Tricia Bowling-Bryant: HOW COULD I BREAK THIS DOWN FOR MY 4TH GRADERS?
01:56:33 Cindy Bryant: Fantabulous presentation! Thank you all so very much!
01:56:40 Jennifer Gailey: Very helpful. Data analysis can be used at all different levels.
01:56:52 kristen grasso: thanks for the ideas
01:57:02 Leticia Tucker-Mickle: www.nctm.org/freeresources
01:57:04 Faith Peddie: @Tricia, check out some of the activities for younger grades here <https://www.nctm.org/tools/pandemic2020/index.html>
01:57:15 Mark Phipps: @Tricia - Plus 6 today, plus 10 next day, etc see how the numbers are changing and show the modeling like days of inspirational math, perhaps
01:57:21 Ann Cola: Such a great presentation...love it spans k-12 ...will share with my colleagues..THANK YOU sooomuch
01:57:32 Kristin Stuby: Great ideas. Thank you!
01:57:43 Devroy McFarlane: If folks are interested in the completed workout of R-0 in an SIR model, there is a great book called Mathematical Biology by J.D. Murray.
01:57:54 Tricia Bowling-Bryant: THANK YOU:)
01:58:13 James Mellody: Thank you, this has been great.
01:58:14 Barbara Boschmans: Thank you!!!
01:58:18 Cheryl Chanaiwa: Thank you!
01:58:20 Lybrya Kebreab: That smile!!!
01:58:20 Densie Pasquale Gagliardi: Thank you!!
01:58:21 johanna RACIOPPO: Thank you
01:58:23 William Speer: Great job, all.
01:58:27 W Gary Martin: THANKS!!!!
01:58:27 Stephanie Simon: Thank you
01:58:28 Chonda Long:

www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/100-Days-Certificate-2020-04-02.pdf

01:58:28 Sandhya Raman: It is a pdf
01:58:29 Katherine Garcia: Thank you!
01:58:30 Christi Edwards: Thank you so much!
01:58:33 Beth Kobett: Thank you everyone for attending!
01:58:36 Mike Shaughnessy: Well done Dave, Beth, Jeff, Dan, and Sarah and Chonda!!
01:58:39 Patrick Montague: Thanks
01:58:41 Leticia Tucker-Mickle: Can I send this to my district so they can use it for all our students?
01:58:44 Mark Phipps: You could drop it in the Q&A
01:58:44 Philip Mojares: Thank you everyone
01:58:45 Sandhya Raman: Chonda...its a pdf
01:58:47 Cindy Bryant: Thanks Chonda!
01:58:48 Sarah Bush: Thank you all for attending!!!
01:58:48 Lybrya Kebreab: Thank you
01:58:49 Cynthia Sumpster: Will there be a list of links
01:58:50 Kristina Grannan: thank you
01:58:50 Philip Mojares: Keep safe always!
01:58:50 Amy Effland: Thank you!
01:58:53 Rebekah Shaw: Thanks!