

00:19:24 Aparna Rajagopal: NJ
00:19:24 Emily Kavanagh: Hello from Columbia, MD
00:19:25 Toni Galassini: Hi from Chicago!
00:19:25 Daniel Irving: Good Evening from North Providence, RI!
00:19:27 Trena Wilkerson: Excited to be here from Waco, TX!
00:19:29 Rebecca Flora: Sunny Redmond WA
00:19:30 Beverly Bailey: Hello from Diamond, Ohio
00:19:31 Audrey Hodgson-Ward: Edmonton Canada
00:19:32 Sheri Landers-Jones: Massachusetts
00:19:34 Anne Federwisch: San Jose, CA
00:19:34 Karen Swift: Hello from Saratoga Springs NY
00:19:35 Samantha Saunders-Glenn: Hello from Maryland!!!
00:19:35 Amanda Helgerson: hello from Mass
00:19:35 Janice Hinkson: Hello from Philadelphia PA
00:19:35 Alicia Charbonneau: Sarasota, Florida
00:19:36 Latrenda Knighten: Hi from Baton Rouge, LA!
00:19:39 Sarah Akins: Yuma, Az
00:19:40 Barbara Post: Hello from Orange, CA
00:19:40 Alison MacAulay: Hi from Toronto
00:19:41 Stephanie Hammes: San Diego, CA—Where we have June Gloom
00:19:41 Monica Roland: Good evening from Savannah, GA
00:19:42 Labonnie Wise Smith: Hello from Culpeper, Virginia
00:19:42 Paula Slezak: Wooster, OH
00:19:42 Lora Condell: Greeting from South Jersey!
00:19:43 Francis Kisner: Another beautiful day in Pennsylvania
00:19:44 Leizell Castilon: Leizell Castillon- AZ
00:19:45 Stephanie Berger: Hello from the Chicagoland Suburbs!
00:19:46 Andrea Pisani: Michigan! :)
00:19:46 Reda Lewis: Atlanta, GA
00:19:46 Kristen Madison: Hi from Houston
00:19:48 Carol Matsumoto: Hi Faith from Winnipeg!
00:19:48 Lisa Aldous: Hello from Maryland!
00:19:48 Cathy Smith: Visalia, California
00:19:48 Shelly Jones: Hello from Connecticut! Glad to be here.
00:19:48 Shannon Pasvogel: Hello to All from Eastern Iowa...
00:19:49 Trena Wilkerson: HI Latrenda!
00:19:51 Sandra MacDonald: Nova Scotia, Canada
00:19:52 Jeffrey Shih: hi from las vegas
00:19:53 Kim Apana: Hello from Concord, California
00:19:54 Ken Krehbiel: Hello from Washington, D.C.
00:19:54 Lara Staker: Hi from Fredonia, Kansas
00:19:58 Viragni Chand: Hi everyone! Form California.
00:19:59 Sharon Forrest: St. Louis here!
00:20:00 Naomi Jessup: Welcome everyone!
00:20:01 Anna LeCuyer: San Carlos, CA
00:20:02 Latrenda Knighten: Hi Trena!
00:20:08 Trena Wilkerson: Hi Jeff!
00:20:14 Mia Ham: Hello from Gardner, Kansas
00:20:16 Cecilia Quinones: Hello From LA California
00:20:17 Joyce Meier: Hello from IL!

00:20:18 Stacy Waskosky: Hi from St Paul, MN
00:20:36 Michelle Boehm: Hello from Brooklyn, NY
00:20:39 Arren Duggan: Hello from Greensboro, NC!
00:20:40 Cecilia Arias: Hello from NJ!
00:20:48 Robert Steede: Hello I am from Bermuda
00:20:53 Shana Frank: Hi, I'm in southeastern Vermont.
00:20:54 dawn petty: Hello from CA
00:20:56 Michelle Bateman: Hello everyone. Bringing greetings from
Atlanta, Ga
00:20:57 Patricia Daugherty: Hello from San Francisco, CA
00:21:00 Leizell Castilon: Hello from AZ
00:21:01 Naomi Jessup: Welcome!!!! I am so glad so many of you are here!
00:21:04 Rebekah Maranzano: Hello from CT
00:21:11 Amanda Jansen: Hello from Delaware!
00:21:16 Trena Wilkerson: HI Carol!
00:21:23 Dalila Rivera: Hello from Kingsville,Tx
00:21:27 Carol Matsumoto: @Trena, @Jeff @Latrenda Hi!
00:21:30 Derrick Fox: Hello from WV
00:21:33 Abdul Razak Othman: Hi Abdul Razak from Malaysia
00:22:13 Trena Wilkerson: Hi Daniel! Twice in one day! Awesome to see
you again!
00:22:35 Carol Matsumoto: @Shelly Hi!
00:22:58 Cecilia Arias: 🙏
00:23:12 Daniel Irving: Hello Trena! So wonderful to see you again too!
Truly an inspiring day between TODOS and now this!
00:23:28 Daniel Irving: Great to see so many familiar names at both events!
:)
00:23:58 Carol Matsumoto: Hi Daniel! Saw you at TODOS!
00:24:11 Sandra MacDonald: very excited to hear all about what you have
to share!
00:24:20 Daniel Irving: Hi Carol! I saw you too! Great to see you!
00:26:25 Lynette Pearce: Lynette Pearce Brisbane Australia
00:27:03 Sandra MacDonald: so sad to hear that from people....
00:28:47 Shelly Jones: What a powerful quote - of what we lose
00:29:24 Sandra MacDonald: all students can participate
00:29:27 Anne Federwisch: Love Notice and Wonder. Low floor, high
ceiling
00:29:31 Stephanie Berger: Engaging students and helping them speak
00:29:31 Rebecca Flora: Everyone can give an answer
00:29:33 Stacy Waskosky: Every person in the room can contribute something to
the conversation
00:29:33 Derrick Fox: Low floor high ceiling
00:29:33 Lisa Stonefoot: There is a place for all students to participate
00:29:34 Kathleen McFadden: Access for all
00:29:34 Mara Weitzman: students surprise me!
00:29:35 Samantha Saunders-Glenn: First timer here
00:29:36 Marianne Mammon: Safe space for students
00:29:38 Rebekah Maranzano: Talk about math
00:29:39 Cecilia Quinones: I love that all students can have a notice
and wonder

00:29:39 Stephanie Hammes: It is a natural part of the MYP (IB) inquiry process.

00:29:40 Toni Galassini: Provides access to all students

00:29:42 Latrenda Knighten: I love using Notice and wonder because everyone has a voice in the discussion

00:29:42 Amanda Helgerson: notice and wonder gives EVERY student an opportunity to engage with mathematics

00:29:42 Sandra MacDonald: safe and enjoyable

00:29:45 Anne Feeney: Even a reluctant math student will participate

00:29:48 Cecilia Quinones: It embarks critical thinking

00:29:49 Amanda Jansen: Gives students a chance to reflect on the problem situation / visual before working on it – get their heads around it

00:29:49 Labonnie Wise Smith: It allows an opportunity for students to share their thinking aloud.

00:29:49 Paula Slezak: It stops me from thinking for the kids. It gives students time to process without the pressure of answering

00:29:51 Karen Swift: It allows all students an opportunity to share their thoughts without being right or wrong.

00:29:52 Stephanie Hammes: Everyone can access it.

00:29:55 Amie Choi: Low floor high ceiling. Great to know what students notice so we can hear their voices.

00:29:55 Shelly Jones: Allow students to put themselves into the space without worrying about “the math”

00:29:56 Arren Duggan: Everyone can contribute their ideas, connections, and help contribute to the community's thinking

00:29:57 Cathy Smith: Students respond well. They all contribute and it's okay what they notice and wonder

00:29:58 Jada Pearson: My hope is for kindergartners to see themselves a mathematicians anywhere and everywhere!

00:29:58 Janice Hinkson: This is new for me

00:29:58 Abby Larson: Access

00:29:58 Lisa Aldous: Use it all the time - increases engagement, sparks interest, see different perspectives

00:29:59 Judette Prospere: Provides an entry point for all

00:29:59 Theresa Collins: This is new to me although I think encouraging students to be curious is very important in the classroom

00:30:02 Kim Apana: Students could give their answers and do not feel there is a right or wrong answer and feel better to participate

00:30:03 Toronzo McInnis: responses are always interesting and insightful!

00:30:13 Leizell Castilon: It does make my students feel like sharing what they see

00:30:14 Michelle Bateman: It gives students an opportunity to engage in conversations and be comfortable and feel safe sharing.

00:30:21 Reda Lewis: Notice and wonder gives everyone a chance to share in a safe environment

00:30:24 Tracy E Dobie: I use it with pre-service teachers – helpful to see through their eyes, easy point of access to the conversation, encourages them to consider student experiences

00:30:29 Katie Gibson: it allows students a way to voice ideas without

worrying about right or wrong. Plus always interesting to hear “notices” that I completely miss

00:30:30 Carol Matsumoto: Hi @Toni Fancy seeing you here🙏

00:30:31 Audrey Hodgson-Ward: Have used Notice and Wonder with preservice teachers who feel it finally gives them a chance to share their thinking and to grow as math thinkers

00:30:35 Daniel Irving: Allows for creativity, no wrong answers, all voices and input are correct and valued. By not limiting students' responses, we see their brilliance, insights and creativity. Leads to wonderful conversations and learning for both students and teachers.

00:30:46 Amanda Helgerson: gives all students a voice

00:30:54 Merrie Skaggs: I have not heard of "notice and wonder" as a program but was attracted to the generic meaning of the phrase.

00:30:57 Anna LeCuyer: seep

00:30:58 Toni Galassini: @Carol Hello again!

00:30:59 Anna LeCuyer: seep

00:31:07 Katie Gibson: My difficulty with it is with my tiny classes (range from 4-8 students)

00:31:07 Anne Federwisch: They always notice or wonder something I never thought of!

00:31:31 Trena Wilkerson: So true @Anne!

00:31:36 Monica Roland: It allows me to see and hear from students about their thinking in regards to the images we view and discuss. Even when it is not math related, I enjoy hearing from them.

00:31:42 Sheri Landers-Jones: I work with preK and notice and wonder guides me towards children's interests and makes me think about where to begin with young students and math thinking

00:33:48 Sandra MacDonald: same in Canada

00:34:56 Amanda Jansen: I love the idea of expanding what counts as mathematics – it helps to connect the notice and wonder practice with this goal

00:35:14 Stephanie Hammes: I love the International Baccalaureate program for its whole child & inquiry lens. Sadly, our MYP academy was “let go” by admin. Sigh.

00:36:10 Cecilia Arias: students can safely enter into the discussion leading to mathematical ideas - what they notice and wonder is always "correct" and ideas can be built upon

00:36:20 Sandra MacDonald: yes, it is obvious that you enjoy it! ;))

00:36:46 Stephanie Hammes: Asset-based approach, to be sure.

00:37:41 Stephanie Hammes: Great for formative assessment, too. :)

00:38:46 Amanda Jansen: Learning from students is a wonderful part of teaching!!

00:38:49 Derrick Fox: These are great success starters too! Great diagnostic for sure. Sometimes they know more or less than you think.

00:39:23 Myrna Cabrerros: are we going to have an access on this PD later on?

00:40:03 Faith Peddie: Yes Myrna! I will be available tomorrow at <https://www.nctm.org/online-learning>

00:40:27 Myrna Cabrerros: thanks,because I'm late.

00:40:50 Faith Peddie: It*

00:40:57 Stephanie Hammes: Teachable moment vs pedantic training on vocabulary. Honors student thinking.

00:41:17 Trena Wilkerson: <https://www.nctm.org/noticeandwonder/>

00:42:05 Trena Wilkerson: I use Problems to Ponder in MTLT with Notice and Wonder!

00:42:11 Stephanie Hammes: Just dropped the graphics into slides for our summer MindFULL Math Camp—they are great!

00:42:27 Faith Peddie: All of these articles will be available at the Notice and Wonder page that Trena just linked! There are also Notice and Wonder backgrounds to use that might spark some curiosity, like Dr. Jessup's.

00:43:38 Rebecca Flora: different colors of green

00:43:40 Stacy Waskosky: Different shades of green

00:43:40 Kristen Madison: Lots of red and green

00:43:40 Mia Ham: The stadium is empty

00:43:41 Jada Pearson: Two different colors of green grass

00:43:41 Song Lee: I notice there are square unit grass.

00:43:45 Anna LeCuyer: The turf is green and the seats are red

00:43:46 Sandra MacDonald: I think there is more green than red in the pic

00:43:46 Judette Prospere: Rectangle, numbers

00:43:48 Derrick Fox: The stadium seating is not symmetrical

00:43:50 Sharon Forrest: There's a number line on the field. There are a lot of sections of seats—some red, some green. And they are all different sizes.

00:43:51 Amanda Jansen: astroturf and thickness

00:43:51 Stephanie Berger: I wonder why there are two cross-sections of turf on the right

00:43:52 Abdul Razak Othman: many rectangles

00:43:53 Samantha Saunders-Glenn: How big is that field

00:43:53 Amanda Helgerson: I notice a football field and stadium. I notice turf

00:43:54 Toni Galassini: I notice the turf are different colors and it's a pattern.

00:43:55 Jeffrey Shih: julio jones is missing

00:43:55 Karen Swift: I notice a lot of rectangles!

00:43:56 Song Lee: I wonder if we are going to deal with area?

00:43:58 Patricia Daugherty: Red and green

00:43:59 Katie Gibson: striped turf - turf in square sections

00:44:00 Arren Duggan: The turf is many different colors

00:44:02 Sandra MacDonald: there's dark and light green

00:44:02 Stephanie Hammes: I see astroturf . .

00:44:02 Cecilia Arias: Alternating green shades

00:44:03 Rebecca Flora: positive and negative numbers

00:44:03 Marianne Mammon: 2 shades of green on the field

00:44:03 Lisa Aldous: I notice a stadium with green grass and red seats, I notice some sort of grass on the right

00:44:04 Shelly Jones: Every other strip of green is light green dark green

00:44:06 Judette Prospere: perimeter

00:44:08 Andrea Pisani: I notice a pattern on the field: dark green and light green rectangles alternating

00:44:08 Kristen Madison: Football field

00:44:09 Lora Condell: the seats are red and black

00:44:10 Cecilia Arias: it's empty!

00:44:11 Patricia Daugherty: epty
00:44:16 Cathy Smith: stadium has lines of grass with different colors. It looks like there is a padding under the grass. Is it artificial?
00:44:17 Sandra MacDonald: the dark green is in rectangular shapes
00:44:17 Jada Pearson: Letters and numbers on the grass
00:44:19 Viragni Chand: Alternate shades of turf
00:44:19 Amanda Helgerson: I notice a square taken out of a square
00:44:20 Abby: Numbers by 10, hundreds of chairs, rows of chairs, layers of turf
00:44:20 Rebecca Flora: red and black seats
00:44:21 Stephanie Hammes: I wonder if fake grass hurts more?
00:44:21 Shelly Jones: Wow! A lot of seats!
00:44:21 Derrick Fox: The falcon is about 10 yards long
00:44:23 Janice Hinkson: skip counting by 10
00:44:23 Paula Slezak: 1/4 of the grass on the right is separated
00:44:24 Theresa Collins: lots of seats, two colors of grass, lots of rectangular shapes, how many seats are there?
00:44:27 Lora Condell: there's a picture in the middle of the field
00:44:28 Genesis Reeves: How many chairs in a row?
00:44:31 Judette Prospere: Parallel sides
00:44:34 Patricia Daugherty: Rectangles and triangles
00:44:35 Sandra MacDonald: numbers are multiples of 10
00:44:36 Cecilia Arias: I don't notice any circles or round shapes
00:44:37 Andrea Pisani: I notice numbers on the field go up by tens
00:44:38 Sheri Landers-Jones: Red and green - green stripes
00:44:39 Leizell Castilon: Shapes
00:44:40 Rebecca Flora: astroturf has layers
00:44:43 Elsa Medina: How many gummy bears would I need to fill the stadium?
00:44:45 Genesis Reeves: How many square tiles make up the field?
00:44:49 Lora Condell: equipment is on the side
00:44:53 Reda Lewis: Pattern of light green and dark green
00:45:09 Leizell Castilon: Squares rectangles
00:45:09 Audrey Hodgson-Ward: how large are the squares in the picture on the right? How many on the field
00:45:18 Sandra MacDonald: the equipment is really small!
00:45:19 Merrie Skaggs: I notice the field and the patterns on the field. I notice the samples on the picture on the right. I am seeing the black patch under the turf. It looks thick.
00:45:21 Rebecca Flora: special seats closer to the field in end zone
00:45:25 Theresa Collins: how many grass tiles does it take for each rectangular shape?
00:45:35 Amanda Helgerson: I notice someone on the 1 yard line
00:45:40 Cecilia Arias: Unless you count the zeros as rounded
00:45:41 Andrea Pisani: I wonder how many people could be seated in this stadium
00:45:42 Francis Kisner: The field looks like it is half dark green and half light. The hash-marks on the field are closer to the center than to the sides. Why? The farther away the stripes are, the narrower they are? Why?
00:45:47 Reda Lewis: There are no circles in the red seats

00:45:50 Cecilia Arias: fake grass!
00:45:53 Shana Frank: The perspective is from above at an angle (not directly above the field).
00:46:27 Derrick Fox: How many of the square turf does it take to cover the field?
00:46:28 Elsa Medina: How much water is needed to keep the grass?
00:46:35 Leizell Castilon: Horizontal and angled colors
00:46:53 Amanda Helgerson: I wonder why the stadium is empty and how many people would fill it up
00:46:54 Mia Ham: How do they get two shades of green on the field
00:46:58 Paula Slezak: How many of the squares on the right would it take to create the field on the left?
00:46:59 Janice Hinkson: What is in the blue boxes
00:47:01 Rebecca Flora: I wonder why they are called the Falcons?
00:47:03 Sheri Landers-Jones: How many people fit in there
00:47:05 Arren Duggan: Is this fake turf or real grass? If it's real, is the black part for drainage? How much water does it take to water the field?
00:47:08 Sandra MacDonald: I wonder if there will be an audience? (Covid times)
00:47:14 Anna LeCuyer: How often does the turf have to be replaced?
00:47:17 Lora Condell: Why do they use different colors of green
00:47:19 Lisa Aldous: I wonder how much work it is to take care of the grass/turf.
00:47:21 Sharon Forrest: What is the size of those squares of astroturf...and how many are needed to cover the field
00:47:24 Tracy E Dobie: How much does all the sod/turf cost to cover the whole field?
00:47:25 Cecilia Arias: Right, why does Atlanta get a team and not, like, Savannah?
00:47:25 Shana Frank: How tall are the goal posts?
00:47:29 Lara Staker: How many layers do you need for artificial turf?
00:47:30 Cathy Smith: How many squares of grass does it take for 5 yard lines?
00:47:32 Rebecca Flora: do the most expensive seats have the best view?
00:47:32 Jada Pearson: How many squares in each stripe on the field?
00:47:33 Marianne Mammon: I wonder how many squares of grass are needed for the field
00:47:37 Patricia Daugherty: Wonder why the kleats don't get stuck in the plastic base of the turf?
00:47:43 Merrie Skaggs: I wonder how thick the turf pad is under the green turf. Is it just the thickness of the one black square? Or is the stack of turf squares the thickness under the green turf that we don't know about?
00:47:46 Judette Prospere: I wonder what's the distance from end to end
00:47:50 Theresa Collins: Why are there two parts to the grass tiles? is it fake grass?
00:47:54 Sarah Akins: How long does it to paint the field?
00:47:54 Sandra MacDonald: I wonder which is larger - the field or the seating area
00:47:55 Rebecca Flora: how many seats and what cost?
00:48:00 Cecilia Arias: I wonder how many 4x4 grass squares would cover the

field between the end zones

00:48:10 Amanda Helgerson: i wonder how many people fit in the stadium with social distance and what percent of the whole stadium would that be

00:48:27 Leizell Castilon: How do they count the number of people?

00:48:40 Carol Matsumoto: I wonder how many stair steps there are?

00:48:53 Lisa Aldous: I wonder how they get rid of the white lines when they play MLS soccer there.

00:49:08 Viragni Chand: I wonder how many people can be seated?

00:49:10 Emily Kavanagh: I notice it is a rectangle. I wonder what the dimensions are.

00:49:27 Sheri Landers-Jones: I wonder how big that bird is?

00:49:30 Cecilia Arias: sometimes grouping the wonderings can help students form questions to explore and answer

00:49:47 Audrey Hodgson-Ward: How long would it take to climb from the field to the highest seats? Does it take the same amount of time to climb down?

00:50:27 Carol Matsumoto: How long is the tunnel?

00:50:31 Faith Peddie: Notice and Wonder Activity:
<https://docs.google.com/presentation/d/1cRwTA-8K0vvEm110F3pQigb5GEk0yYqfE4kKR1D1Zxk/copy>

00:50:59 Cecilia Arias: sometimes grouping the wonderings can help students form questions to explore and answer

00:52:02 Jada Pearson: The dates out of order

00:52:04 Karen Swift: I notice the dates are not in consecutive order

00:52:27 Audrey Hodgson-Ward: Some of these are scary

00:52:30 Theresa Collins: the dates are not in order

00:52:33 Marianne Mammon: The colored bars are not in the same place every month

00:52:43 Carol Matsumoto: I agree Jada and Karen.

00:52:49 Cecilia Arias: Hall County... how did they do that?!

00:52:51 Derrick Fox: Cobb was highest on 4/28 but lowest on all others.

00:52:52 Lora Condell: Cobb had the most cases by far on april 28

00:52:55 Mia Ham: There is a decline

00:52:56 Stephanie Hammes: I wonder if they are attempting to skew the data with the dates . . . hmmm.

00:52:57 Sandra MacDonald: I can't see the dates

00:52:58 Lisa Aldous: I noticed blue (Hall county) was hit hard early, then dropped significantly.

00:52:59 Sharon Forrest: The yellow bars don't seem like they vary in height as much as the other colors.

00:53:00 Tina Mott: Hall has a large blue bar April 28

00:53:00 Paula Slezak: The data is not organized in a way that makes it easy to analyze

00:53:01 Kristen Madison: The color of the tallest bar varies week over week

00:53:02 Leizell Castilon: 5 colors to represent the group

00:53:02 Francis Kisner: Over the time, each county has had a time when they were the high count.

00:53:04 Cathy Smith: Hall seems to have decreased greatly

00:53:05 Viragni Chand: The dates are out of order. The bars are decreasing order

00:53:05 Sarah Akins: the counties are listed from greatest to least
00:53:07 Kim Apana: even dates on top and odd dates on the bottom
00:53:19 Lora Condell: May 9 had the least cases overall
00:53:21 Sheri Landers-Jones: Shortest is to the right and longest to left
00:53:26 Labonnie Wise Smith: The number of COVID cases in Hall County
decreased over time
00:53:30 Cecilia Arias: the blue bar (Hall) started out the tallest but then
disappeared
00:53:37 Stephanie Hammes: I wonder what happened to drop Hall County
so rapidly.
00:53:40 Theresa Collins: Fulton county has 8 days of the highest
00:53:45 Shelly Jones: I noticed the blue bar was really tall but then in
the end was one of the shortest. Seemed to decrease the most.
00:53:53 Cecilia Arias: hmm... so make the data support the case to ease
restrictions?
00:53:58 Judette Prospere: Skewed right
00:54:04 Cecilia Arias: "How to lie with data"
00:54:09 Karen Swift: I notice that the title mentions "deaths and
hospitalizations" but the vertical scale does not have any label, so I don't know
what the numbers really mean.
00:54:19 Sandra MacDonald: I wonder if he shared the dates
00:54:42 Lisa Aldous: I noticed the label says cases, deaths, and
hospitalizations.
00:54:48 Stephanie Hammes: I wonder if Fulton County has more citizens
with higher risk factors and/or more essential workers.
00:55:01 Amanda Jansen: The order of the dates!!!
00:55:15 Marianne Mammon: The vertical axis is not labeled
00:55:22 Shelly Jones: OMG! The dates!
00:55:22 Theresa Collins: the data is sorted by greatest to least
deaths to show a decline, however, it is not a very honest way to present it
00:56:05 Stephanie Hammes: Definitely a case of lies, damned lies, &
statistics!
00:56:10 Samantha Saunders-Glenn: Whoa????
00:56:17 Lisa Aldous: So the state of Georgia actually put this out?
00:56:27 Shelly Jones: I think I remember this. Wow!
00:56:44 Cecilia Arias: each time I see the way this covid data was
displayed, I'm wowed
00:56:45 Theresa Collins: the title says # confirmed cases, but the
description says number of deaths and hospitalizations
00:56:45 Merrie Skaggs: I remember seeing this on the news.
00:56:50 Stephanie Hammes: FL fired their amazing woman doing the data
visualizations & she kept putting out her great work!
00:58:31 Stephanie Hammes: This is why we need to have education in
statistics and data science. Glad CA is now offering a path to Stats as top level HS
course in place of Calculus.
00:58:47 Cecilia Arias: reading and writing the world with mathematics can
reveal truths or untruths
00:59:20 Paula Slezak: As someone who teaches multiple math classes a day -
YES! What works for one class will completely go a different direction with a
different class.

00:59:20 Jada Pearson: These are people not just numbers. So challenging!

00:59:41 Stephanie Hammes: The what do you feel question is a good addition for this kind of a N & W.

00:59:50 Cecilia Arias: agreed, Stephanie

01:00:35 Samantha Saunders-Glenn: Thank you for stating that... relationships are key when making cultural, social justice curriculum

01:00:56 Stephanie Hammes: Thanks for validating that b/c I had this wondering about COVID data.

01:00:56 Cecilia Arias: Yes, TY for sharing, this is the challenge to teaching math for social justice - choosing topics and times to engage students

01:00:57 Theresa Collins: it is good to use real data for these activities but would be wise to think about your student body or your audience

01:01:50 Paula Fleshman: An important and beautiful point.

01:01:53 Audrey Hodgson-Ward: What an important aspect of teaching to keep in mind! Yes, we do want to make the math relevant but it's not always the best way to deal with ideas and emotions

01:02:50 Stephanie Hammes: Cultivating Genius

01:05:19 Genesis Reeves: This is a great idea using cultural images to apply with our students. Very important to make math relatable-helps students make connections in the classroom and the world around them.

01:05:26 Stephanie Hammes: Again, honors the math knowing our kids & families have & use.

01:05:32 Samantha Saunders-Glenn: Love this!!!

01:06:53 Stephanie Hammes: The hair one may see disconnected coming from me, a Euro-mutt, but we can create a space where our students create their own that do speak to their lived experiences.

01:07:31 Cecilia Arias: Yes to this research 🙌

01:08:22 Cecilia Arias: Yes @Stephanie. It's important to create these spaces for students but to also have teachers share from their POVs, too.

01:08:31 Stephanie Hammes: If you have yet to read or explore P. Liljedahl's Building Thinking Classrooms, put it on your summer reading list. It fits so beautifully with Naomi's approach to N & W through an equity and socially & culturally relevant teaching lens.

01:10:07 Shelly Jones: TY @Stephanie H.

01:12:43 Stephanie Hammes: Dr. Jessup, Thank you SO much for taking this practice & putting these critical lenses on them. You make my math equity heart fuller. :)

01:14:28 Stephanie Hammes: I love that one of the main goals of CPM is to seek to raise the math status of students who are often left out or left behind. I also love Jo Boaler & Youcubed.org for that.

01:14:33 Shelly Jones: Wonderful work being done. Thank you for sharing.

01:14:45 Sandra MacDonald: thanks very much!

01:15:03 Merrie Skaggs: Fascinating research! Thank you for sharing the specifics.

01:15:04 Viragni Chand: Thank you very much for sharing

01:15:20 Stephanie Hammes: Keep up this work! It is so important & thank you NCTM for bring us Dr. Jessup's voice. More, please.

01:15:32 Stephanie Hammes: bringing

01:16:03 Sandra MacDonald: Certainly did!

01:16:07 Cecilia Arias: 🙌🙌🙌

01:16:09 Sarah Akins: Thank you!!!
01:16:09 Christine Thomas: Loved learning about the work you are doing.
01:16:09 Cathy Smith: Thank you
01:16:13 Monica Roland: Thank you!
01:16:15 Sheri Landers-Jones: Thank you so much!
01:16:18 Lara Staker: I Loved your presentation.
01:16:19 Patricia Daugherty: Thank you SO much!
01:16:21 Theresa Collins: thank you
01:16:22 Stephanie Berger: Thank you!!
01:16:23 Stephanie Hammes: Building Thinking Classrooms is all about
disrupting . . . esp. non-thinking. :)
01:16:23 Michelle Bateman: Thank you!
01:16:24 Joyce Meier: Thank you!
01:16:25 Judette Prospere: Thank you!
01:16:25 Amanda Helgerson: Thank you
01:16:25 Janice Hinkson: Thank you!! and Thank you for the resources
01:16:26 Arren Duggan: Thank you!!!
01:16:27 Trena Wilkerson: Outstanding, engaging session! Thank you!
01:16:27 Reda Lewis: Thank you for sharing the links
01:16:28 Leizell Castilon: Thank you!
01:16:30 Merrie Skaggs: Thank you!
01:16:31 Andrea Pisani: Thank you!! :)
01:16:34 Mia Ham: Thank you, this was very informative!
01:16:34 Kim Apana: Thank You!
01:16:36 Lisa Aldous: Thank you so much!
01:16:37 Carol Matsumoto: Thank you!
01:16:38 Karen Swift: Thank you!
01:16:39 Tara Palomares: Thank you!
01:16:39 Jada Pearson: This time flew by! Thank you!
01:16:40 Stephanie Hammes: Thank you so very much for your voice &
lens!
01:16:43 Jeffrey Shih: Thank you!
01:16:43 Stacy Waskosky: Thank you!
01:16:45 Samantha Saunders-Glenn: This was amazing! Thank you for
doing the work and centering the marginalized;)
01:16:49 Cecilia Arias: Wonderful. TY :)
01:16:53 Abby: What a great overview! Thank you! And thank you for bringing
race and equity into the conversation.
01:16:57 Shelly Jones: BTW Hi @Carol M great seeing you again.
01:16:59 Amanda Jansen: thanks, Naomi!!
01:16:59 Tracy E Dobie: Go Naomi! Thanks so much for sharing :) This was
great. Love notice and wonder!
01:17:00 Latrenda Knighten: Thank you!!
01:17:12 Esther Winikoff: Thank you!
01:17:15 Audrey Hodgson-Ward: Fascinating look at important issues. Thanks
so much for all of what you have shared and for your passion about this learning
01:17:17 Paula Fleshman: An awesome, awesome presentation!!
01:17:20 Daniel Irving: Thank you for this incredible session!!!
01:17:22 Naomi Jessup: Thank you so much for coming! You all are so
amazing!!! I was having a rough day so you definitely made my night. I appreciate

you all so much!!!

01:17:24 Judith Ripke: Thank you! Just wondering, for our youngest students, could NCTM make large Notice and Wonder owl and snail we could use for puppets when we do noticing and wondering?

01:17:31 Stephanie Hammes: Is that a hipster Notice or a Winter Notice?
:)

01:17:32 Genesis Reeves: Thank you so much for this presentation. I appreciate you were able to bring a lot to the forum that are happening in the classroom and helping educators to become aware of how we can do better and be better in our math classrooms for our students. Thank you again. Blessings!

01:17:35 Reda Lewis: Would you give the link again to find the Notice and Wonder

01:17:45 Reda Lewis: Previous classes

01:17:54 Emily Kavanagh: Thanks

01:18:38 Lora Condell: Thank you!

01:18:38 Francis Kisner: Thank you for the presentation. Although I teach at the college level, the technique is still valuable. Also, for the last month, I have been having on-line conversations with a young woman who just finished 2nd grade (and her mother). We are not doing any systematic study but just talking with each other as one mathematician to another or one scientist to another. I like to pose notice and wonder to keep our conversations moving.

01:18:55 Stephanie Hammes: Good to see you here, Trena!

01:19:00 Labonnie Wise Smith: Thank you for the webinar! All great information!

01:19:10 Trena Wilkerson: Hi Stephanie!

01:19:43 Trena Wilkerson: www.nctm.org/noticandwonder

01:20:09 Cecilia Arias: TY in particular for sharing what you learned about using SJ topics appropriately - at the right time with students.

01:20:16 Faith Peddie: <https://www.nctm.org/online-learning>

01:21:58 Derrick Fox: We are really focusing on accelerated learning this year in my county and notice and wonders are a great success starter to get rolling.

01:22:18 Shana Frank: I'd be interested in a webinar how you follow up with Notice & Wonder. How does it lead into a lesson?

01:22:20 Paula Slezak: I have found in my classroom, they start doing notice and wonder when I didn't ask them. It's the best.

01:23:04 Trena Wilkerson: So true Paula! It becomes their math habit!

01:23:37 Derrick Fox: Thanks for you time this evening. I appreciate your time.

01:23:54 Mia Ham: I am an education major and plan to start notice and wonder as soon as I start teaching!

01:24:03 Alison MacAulay: Thank you for a great session!

01:24:12 Trena Wilkerson: Yeah Mia!

01:24:28 Cecilia Arias: Love the conversation!

01:24:31 Cecilia Arias: Lots of ideas!