

00:15:14 Trena Wilkerson: Hello everyone from Waco, TX!  
00:15:32 Christina Montiel: Jackson, WY  
00:15:34 Kyle Carpenter: Hello all, this is Kyle from Huntsville, AL!  
00:15:35 Kristan Whelan: Kristan from New York  
00:15:44 April Schofield: April from Wisconsin  
00:15:45 Patricia Helmuth: Hello from New York State  
00:15:45 Ken Krehbiel: Hello everyone, from Washington, D.C.  
00:15:47 Lisa Stone: Hello from San Diego, CA  
00:15:48 Jessica Moody: Jessica from North Carolina  
00:15:49 Jessica Wentworth: Jess from New Hampshire  
00:15:50 Quarelli Christina: Christina from Phoenix, AZ!  
00:15:50 Annie Fetter: Annie from suburban Philly.  
00:15:56 Mackenzie Abbott: Hello! From Prescott,AZ  
00:15:56 Alexis Williams: Lexi teaching in Maryland but from Brooklyn!  
00:15:56 Kim Jones: Hi Plano, TX  
00:15:57 Abby White: Maryland  
00:15:58 Edmond Lau: Hi, Edmond from Hong Kong  
00:15:58 Renee Kanari: Hi from Illinois  
00:15:58 Tran Trang: Tran from NH  
00:16:00 Matthew Rodolewicz: Johnston, Rhode Island  
00:16:01 Maeve Mihan: Maeve from Mechanicsburg, PA  
00:16:02 Tiffanie Nealy: Tiffanie: Atlanta, Georgia  
00:16:07 Carolyn Vincent: Hello from Dallas, TX  
00:16:07 Linda Loomis: Hello from Clarksburg, MD  
00:16:08 Victoria Amarasiri: New Jersey  
00:16:08 Laura Szum: MA  
00:16:09 David Cohen: Howdy from Austin, TX  
00:16:11 Molly and Maria: Molly - Taneytown, MD  
00:16:14 Makeey Shedyak: Vermont  
00:16:14 Sherri Poulin: Maine  
00:16:15 Zachary Malegiannakis: Zach from Bronx, NY  
00:16:20 Molly and Maria: Maria- Gettysburg, PA  
00:16:21 Raewyn Eden: Raewyn - Aotearoa New Zealand  
00:16:21 John Yim: Oklahoma City, OK  
00:16:23 Linda Gojak: Hi from Cleveland, OH  
00:16:24 Lisa Stone: San Diego, CA  
00:16:27 HelenaMarie Stevens: Good evening from St Croix USVI  
00:16:28 Makeey Shedyak: Essex VT  
00:16:35 Rachel Garratt: Mechanicsburg, PA  
00:16:44 debra queen: Debra from Fredericksburg VA  
00:16:49 M. Bull: Tennessee  
00:16:53 Makeey Shedyak: Yes!!!  
00:16:55 Barb Dow: Hi from Georgia, VT  
00:16:59 Arthur Mabbott: Art in Woodinville,wa  
00:17:00 Ellen Clay: Hi Philadelphia  
00:17:13 Annie Fetter: Hi, Ellen!  
00:17:20 Barb Dow: Hi from Georgia, VT  
00:17:20 Arthur Mabbott: Art in Woodinville  
00:17:23 Daniel Irving: Hello from North Providence, RI!  
00:17:35 Annie Fetter: Hi, Art!!

00:18:14 Matthew Rodolewicz: Hi Daniel Irving - From Johnston, RI here :)  
00:18:52 Rubina Noor: Hello from Memphis, TN.  
00:18:53 Trena Wilkerson: Thank you McGraw Hill and Annie Fetter!  
00:19:03 Jessica Wentworth: Jess from New Hampshire  
00:19:07 Trena Wilkerson: Hi Daniel!  
00:19:36 Christine Paige: Hello. Christine from Birmingham, AL.  
00:19:56 Angela Luchini: Hello from Pittsburgh, PA!  
00:19:57 Indalia Berner: Hello! Indalia from Chicago!  
00:20:04 Romel Badilla: Romel Badilla, KHPES Hawaii  
00:20:10 Christine Horch: Hello from Glenwood Springs, Colorado!  
00:20:51 Arthur Mabbott: 25  
00:20:53 Kelli Dunn: 32  
00:20:54 Ellen Clay: 25  
00:20:56 Anna Clifford: 28  
00:20:56 Thomas Wintering: 30  
00:20:57 Lisa Stone: 24  
00:20:57 Tiffanie Nealy: 28  
00:20:59 Matthew Rodolewicz: 32  
00:21:00 Linda Loomis: 32  
00:21:01 Amanda Rickard: 26  
00:21:03 Anne Guerriero: 99%  
00:21:03 Latryce Cole: 32  
00:21:05 Raewyn Eden: all of them!  
00:21:05 Zachary Malegiannakis: 32  
00:21:05 Alexis Williams: 18 students (50%)  
00:21:05 Barb Dow: 25  
00:21:05 Mardi Gale: You really looked back for How Old is the Shepard!  
00:21:06 Indalia Berner: 100%  
00:21:07 Victoria Mayer: 30 students  
00:21:07 David Cohen: 23  
00:21:08 Angela Luchini: 75%  
00:21:09 Arthur Mabbott: 25 years old  
00:21:10 Patricia Helmuth: 100%  
00:21:11 M. Bull: 30  
00:21:11 Kim Jones: 85%  
00:21:13 Molly and Maria: 30 students  
00:21:15 Ellen Clay: 25 eighth grade students  
00:21:15 Kristan Whelan: 90%  
00:21:16 Geleisa George: 50% tried to figure something out  
00:21:19 debra queen: 75%  
00:21:19 Mary McMahan-Chappell: 100%  
00:21:25 Jessica Wentworth: 32  
00:32:19 Flávia Sueli Marcatto: Hello from Brazil!  
00:34:58 Trena Wilkerson: Joy!! Love it!  
00:36:09 Cathy Scovil: Hello!  
00:36:44 Cathy Scovil: I am Cathy from Arizona.  
00:41:53 Thomas Wintering: Is that "noticing what your class hit and didn't" more for a personal reflection or a "reveal" of what things anticipated to the class and a discussion of whether or not the group addressed various things and further discuss the details there? This was in reference to the textbook doctor

graph example you gave.

00:43:16 Christine Paige: I love this.  
00:43:36 Trena Wilkerson: Me, too @Christine!  
00:47:01 Patricia Helmuth: Love the sticky note idea!  
00:48:15 Victoria Mayer: There  
00:48:15 Alexis Williams: The pattern is symmetric!  
00:48:17 Angela Luchini: green and orange tiles  
00:48:18 Matthew Rodolewicz: wordle  
00:48:21 Christina Montiel: mirror  
00:48:25 Angela Luchini: 4X5  
00:48:27 Geleisa George: 5 squares in each row  
00:48:29 Patricia Helmuth: There are green and orange squares  
00:48:30 Anne Guerriero: There are equal amounts of both colors  
00:48:30 Zachary Malegiannakis: Arithmetic sequences  
00:48:32 Geleisa George: 2 colors  
00:48:32 Julie Perkins: Inverse pattern  
00:48:34 Joslyn Richardson: array  
00:48:37 Kristen Betker: matching  
00:48:39 Melissa Johnson: There are an equal amount of orange and  
green squares.  
00:48:40 Mardi Gale: Which One Doesn't Belong.....wodb.ca  
00:48:43 Joanna Smith: Same number of green vs orange  
00:48:45 Toni Rowe: Pattern  
00:48:45 Claire Hazlett: the top and bottom are opposite. so are the 2 in the  
middle.  
00:48:45 Ellen Clay: symmetric about the horizontal middle line with the  
opposite colors  
00:48:47 Molly and Maria: They are opposite. And there is an equal  
number of orange/green  
00:48:54 M. Bull: Half and half  
00:48:59 Laura Szum: rows and columns  
00:49:03 Christine Martin: there are equal amounts of green and orange  
tiles  
00:49:04 Victoria Amarasiri: I see a reflected pattern across orange and  
green.  
00:49:08 Amanda Rickard: 1/2 is green and 1/2 is yellow  
00:49:12 Patricia Helmuth: I see groups of 3, 4 , 2 and 1  
00:49:13 Kristen Betker: ratios  
00:49:15 Thomas Wintering: tetris  
00:49:17 Ellen Clay: 10/20 of the squares are orange  
00:49:34 Abbe Kellner: How many squares?  
00:49:47 Raewyn Eden: You could swap out some orange and green squares  
00:50:02 Victoria Amarasiri: Each row is a whole.  
00:50:04 Alexis Williams: Each row represents a whole apple  
00:50:05 Molly and Maria: It looks like a tree  
00:50:06 Ellen Clay: There are 4 apples  
00:50:07 Christina Montiel: Whole, halves, thirds, quarters  
00:50:07 Victoria Mayer: fractions  
00:50:07 Kyle Carpenter: percents and ratios  
00:50:09 Matthew Rodolewicz: 1+2+3+4

00:50:10 Makeey Shedyak: 25

00:50:12 Angela Luchini: The apples get smaller as the rows increase

00:50:12 Jennifer Shammass: 1, 2, 3, 4,

00:50:13 Alexis Williams: The pieces get smaller

00:50:14 Makeey Shedyak: fractions

00:50:16 Anne Feeney: Whole to halves to thirds to fourths

00:50:18 Victoria Angelo: fractions

00:50:21 Christine Martin: 1 whole apple, then cut in halves, thirds, and fourths

00:50:26 Patricia Helmuth: it looks like a pattern that is getting smaller yet bigger

00:50:27 Anne Guerriero: It must have been really hard to cut an apple into thirds!

00:50:27 Maeve Mihan: The apples are arranged in a pyramid or triangle shape

00:50:32 Zachary Malegiannakis: Equilateral triangle

00:50:36 Toni Rowe: Converstions

00:50:39 Mardi Gale: Great website for sense making and encouraging discussion and justification: Which One Doesn't Belong wodb.ca

00:50:39 Kristan Whelan: whole, halves, thirds, fourths

00:50:41 Raewyn Eden: The (whole) apples are different sizes...

00:50:45 Julie Perkins: Fractions

00:50:52 John Yim:  $f(n) = 1/n$

00:50:53 Joanna Smith: As we move down the triangle, the apples are half the size of the apples in the previous row

00:50:55 Edmond Lau: Pyramid

00:50:56 Ellen Clay:  $1 + 1/2 + 1/2 + 1/3 + 1/3 + 1/3 + 1/4 + 1/4 + 1/4 + 1/4 = 4$

00:50:58 Amanda Rickard: 4 wholes total

00:51:02 Scott Steketee: How many ways can you cut up an apple?

00:51:08 Ellen Clay: Can we eat them?

00:51:29 John Olson: Some of the pieces in a row do not seem equal

00:59:25 Mardi Gale: Improves retention when THEY do it

01:02:39 Trena Wilkerson: Empowers students—gives them voice—supports positive math identity development! :-) Awesome Annie!

01:05:41 Trena Wilkerson: Yes!!

01:07:29 Linda Loomis: What are equity commentaries?

01:07:54 Laura Goodspeed: I noticed that pictures are really powerful. I wondered how I can get teachers excited. This was amazing!

01:08:11 John Yim: NOTICE:

01:08:12 Victoria Amarasiri: So many concepts have been brought to life - cognition, polya's problem solving, deep understanding.

01:08:23 Victoria Amarasiri: wonderful presentation.

01:08:23 Lauren Bowman: Notice: There are so many little things that can be done daily to increase students' sense making

01:08:26 Kristen Betker: I noticed the students have much more of a voice and are way more of a voice in their math education

01:08:28 Tiffanie Nealy: Noticed: It confirmed my thinking and supports developing students with 'mathfidence' Wonder: About the resources you shared - eager to get to them to get others in the journey with me

01:08:32 Maeve Mihan: NOTICE:

01:08:46 Jennifer Shammas: levels playing field

01:08:51 Raewyn Eden: Might be the wrong audience (!!!) but I'm wondering if the question "Are you asking idea-focused questions or answer-focused questions?" might apply beyond maths...

01:08:51 Anne Guerriero: NOTICE: ALL STUDENTS have ideas about the problems we use.

01:08:56 Kristen Betker: I notice that it seems so easy to tweak for such a major change

01:09:00 Maeve Mihan: NOTICE: This approach to math is very student centered!! So much different from the math instruction I experienced in elementary school

01:09:16 Raewyn Eden: Awesome! :)

01:09:20 Christine Horch: Notice: the more quiet I am in the Notice portion of the Launch the more voices I start to hear. HS kids don't always like the "void"

01:09:22 Geleisa George: Wonder: How much is too much support for getting at sense making for students who struggle to put language to their thinking

01:09:25 Kristen Betker: I'm wondering how to know if my question prompt or task is going to be a good one for them

01:09:44 Makeey Shedyak: Gets kids talking about math

01:09:44 April Schofield: Notice: Wondering about equity commentaries also

01:09:57 Anne Guerriero: WONDER: Where could I take out the numbers to get kids thinking even more and making sense for themselves?

01:10:08 Edmond Lau: Wonder: What do you mean by "monitor for sense making"?

01:10:22 Victoria Amarasiri: I wonder at what point do we go symbolic, and do we go back and forth.

01:10:37 Kelli Dunn: So cool! Annie, you inspire me!

01:10:52 Makeey Shedyak: increases the sharing of ideas with others

01:10:53 Toni Rowe: I noticed that its a great way to get kid to talk I wonder, about coming up with ideas

01:11:31 Abby White: I noticed that you focused on student's attitudes and dispositions, and i'm wondering how to interrupt learned helplessness in students who don't believe they can be successful in math

01:11:41 Scott Steketee: WONDER: is kids' dislike of the "void" actually an opportunity for getting them involved? Can teacher silence be a prompt for kids?

01:12:28 Quarelli Christina: I noticed you focus on the journey vs. the destination and that the destination will come!

01:12:35 Christine Martin: Notice: all students have ideas of the problems we use everyday in class. Wondering: How long to share their responses?

01:12:41 Raewyn Eden: @Abby - I would say let them BE successful (by using notice/wonder for instance)???

01:12:43 Edmond Lau: Thank you.

01:12:44 Arthur Mabbott: Connecting the Algebra & the Geometry.

01:12:50 Patricia Helmuth: I wonder if you have done any research in terms of how adult learners benefit from notice/wonder? (Students who are studying to take GED exam.) I've noticed that it is a way to level the playing field especially for adult learners who suffer from math anxiety.

01:12:58 Kelli Dunn: How do we encourage thinking when kids think they "know" it since they've memorized an answer?!?!??

01:13:11 Zachary Malegiannakis: Notice: Student's dispositions have a great impact on their mathematical development.

01:13:43 Scott Steketee: How sad is it to arrive at the destination without enjoying the trip?

01:14:07 Lisa Stone: Notice: When you do notice and wonder, everyone has access. I have even done it with non-verbal students who will point and gesture. Especially with graphs and images.

01:14:28 Maeve Mihan: Wonder: How do we navigate noticing and wondering in our lessons when our schools' math curriculum is very scripted?

01:14:31 Mardi Gale: Kelli...have them model the problem so they can justify/prove their answers.

01:14:54 Zachary Malegiannakis: Wonder: How can we adapt our classroom environment so that we can help students develop a more positive outlook towards Math?

01:15:12 Cathy Scovil: I noticed that I can modify my CGI word problems that I start my math groups with by adding the numbers later I wonder if this will be ok with my school because they are back to basics, traditional school.

01:15:12 Arthur Mabbott: Why are the answers are the answers..

01:16:05 Quarelli Christina: I wonder how we get parents on board when they too grew up with straight algorithms and focused on calculating...

01:16:14 Scott Steketee: My reference to the "void" was repeating someone's mention of the discomfort kids sometimes have in class when no one is speaking.

01:16:53 Scott Steketee: The "void" can be space to think about math.

01:17:02 Arthur Mabbott: I've had teachers tell me that,

01:17:11 Linda Gojak: Quarelli, I gave them the opportunity to do this kind of thinking...at open house or even in conferences...or have the kids take home something to notice and wonder about it. They loved it!

01:17:14 Angela Luchini: I do notice and wonder in my class already, but how do I engage my students more to look more in depth into the image that may be presented. I work in a city school that students give up very easily and don't put effort in.

01:17:16 Kelli Dunn: I learned it at : (Kumon!!!

01:17:22 Jennifer Shammass: Noticed why and wondered why

01:17:49 Arthur Mabbott: AWESOME!!

01:18:02 Scott Steketee: Thank you Annie!!!

01:18:13 Anne Guerriero: Thank you!

01:18:13 Barbara Borgwardt: Thanks so much!

01:18:16 Patricia Helmuth: It was great to hear you speak! Loved your video. Notice/wonder has been a game changer with my adult students and in my PD.

01:18:17 Kim Jones: Thank you too much!

01:18:19 Zachary Malegiannakis: How do we get CTLE credit for this?

01:18:19 Christine Horch: thank you!

01:18:19 Laura Szum: Thank you very much!

01:18:21 Ellen Clay: Thanks Annie, it was great to see you! You were wonderful as ever!!

01:18:21 Alexis Williams: Thank you so much!

01:18:21 Raewyn Eden: Thanks - what a great session! :)

01:18:21 Abby White: Thanks!

01:18:22 Christine Martin: Thank you!! Great presentation!  
01:18:25 Jessica Wentworth: Thank you!!\  
01:18:25 Kristan Whelan: Thank you!  
01:18:25 Lisa Stone: Thank you.  
01:18:25 Trena Wilkerson: Check out the notice and wonder characters!  
<https://www.nctm.org/noticeandwonder/>  
01:18:26 Joanna Smith: Thank you!  
01:18:26 Amanda Rickard: Thanks  
01:18:26 Makeey Shedyak: I have kids who want to have an answers  
01:18:26 Kelli Dunn: Yeah!  
01:18:30 Rachel Garratt: Thank you so much!!! This was so great!  
01:18:30 Kristen Betker: inspiring thank u!  
01:18:31 Maeve Mihan: Thank you!  
01:18:32 John Yim: Thanks!  
01:18:33 Victoria Amarasiri: Thank you. Wonderful presentation.  
01:18:33 Sherri Poulin: Thank you Annie!! From, Sherri Poulin in Corinth,  
Maine  
01:18:33 Donald Williams: Good job!  
01:18:34 Linda Loomis: Thank you so much!  
01:18:37 Cassie Barbush: Thank you!  
01:18:40 Trena Wilkerson: Thank you Annie for an engaging time of  
noticing and wondering!  
01:18:44 Jennifer Shammass: Thank you  
01:18:45 Latryce Cole: Thank you!  
01:18:48 Makeey Shedyak: Thanks  
01:18:48 HelenaMarie Stevens: thank you  
01:18:53 Laura Goodspeed: Thank you so much!! That was amazing!  
01:18:56 Tiffanie Nealy: That was totally AWESOME!!!!!! 😊  
01:19:01 Matthew Rodolewicz: Thank you!  
01:19:05 Zachary Malegiannakis: How do we get CTLE credit for this webinar?  
01:19:06 Rubina Noor: Thanks!  
01:19:13 Kelli Dunn: I want Notice and Wonder puppets!  
01:19:35 Daniel Irving: Thank you!  
01:19:39 Tran Trang: Thank you so much! That was very interesting and  
awesome!!!!!!!  
01:19:57 Kyle Carpenter: thank you, very good discussion!  
01:20:14 Trena Wilkerson: Fun idea @Kelli!  
01:20:23 Joslyn Richardson: Thx so much