

00:25:59 Cindy Bryant: Hello from Springfield, MO. Please set your chat to "All panelists and attendees" so everyone can see your posts.

00:26:00 Trena Wilkerson: Hello from Waco, TX!

00:26:23 Jorge Veloso: Hello from Angola.

00:26:24 Lawanda Mahomes: Hi everyone! Chicago, Illinois

00:26:24 Jennifer Dwosh: Tempe, AZ 1st session

00:26:25 Maria Dolores Estravez: hello from fort washington, md

00:26:27 Linda Koval: Hello from Bealeton, VA! 21 Sessions.

00:26:29 Emily Kavanagh: Hello from Columbia, MD

00:26:29 Georgina Coffin: Hello from Fircrest, Washington

00:26:31 Maria Padiernos: Hello from Detroit, MI maybe 45

00:26:33 Doris Tannenbaum: Nj 4sessions

00:26:34 Jaime Higgins: Hello from Philly. This is my 4th or 5th.

00:26:36 Stacie Kyhn: Hey howdy from AZ!

00:26:36 CINDA HOLLAND: Berea, KY

00:26:36 John Sasko: Hello from Mount Vernon NY (NYC metro area). This is my 18th session

00:26:37 Natasha Gambarov: Hello from MA! This is my 21st session

00:26:38 Brian Pletsch: Chicago,IL 1st session

00:26:40 Melonie Smith: Hello from Chicago

00:26:41 Arlene Bachinela: Hi from Baltimore Maryland

00:26:42 Lesly Brown: Hello from Knoxville, Tennessee!

00:26:43 Tanya Landry: Hi from Baton Rouge, LA!

00:26:44 Jorge Veloso: I don't remember the absolute number, but more than 90%.

00:26:46 Amy Cole: Hello from Boston Massachusetts, sessions

00:26:46 Tina Hill: Howdy! from northeast TN

00:26:46 Kina Bellah: Hello from Oregon! This is my second session.

00:26:48 Jeff Shih: hi from las vegas!

00:26:51 Kristie Chandler: Hello from VA! I've lost count!

00:26:52 Sharon Black-MacKinnon: hello from NB Canada

00:26:57 jeanine colwell: hello from Newport NC, I have been to 50 webinars

00:26:58 Linda Himes: Hi from Walnut, CA

00:27:02 Wanda Parker: Hi from Halifax Co, VA 20th session

00:27:02 Emily Kavanagh: I have lost count but been to most

00:27:09 Bryan Duffey: Yo, from Philly.

00:27:13 kim bolf: Duluth MN

00:27:13 Sharon Black-MacKinnon: This is 79th session

00:27:15 Debbie Meaney: Hello from NC

00:27:17 Gloria Flores: Hello from Texas

00:27:19 Daniel Irving: Hello from North Providence, RI! I have attended all of these webinars.

00:27:21 Patricia Johnston: Hello from Laurel, Md. approx. 30 meetings.

00:27:25 Chad Hale: from OHIO

00:27:27 Donna Mischiagna: Hi from Tucson, AZ. I don't remember how many webinars I have been too. A lot.

00:27:29 Susan Bardenhagen: Manassas Virginia, 30 miles from DC. This is probably my 50+!

00:27:39 Mark Phipps: Mesa, AZ - Today is my 79th live session

00:27:41 Eileen Zymroz: Massachusetts
00:27:45 Esther Winikoff: hello from Baltimore, MD!
00:27:49 Mary Lyons: Mary from Toledo, OH
00:27:58 Denika Gum: Hi from Virginia - around 20!
00:27:59 Michael Lanstrum: Hello from Cleveland, Ohio
00:27:59 Justin Klinger: Hello from Romeoville IL my 30 something. I lost
count. I could be in the 40s
00:28:09 Pamela Liegl: Hi from Streator, IL
00:28:10 Jen McFall: Stanwood... 28
00:28:18 LANY JAMERO: good morning from Philippines
00:28:27 Evangeline Pabulayan: from PA
00:28:35 Laurie Walker: Hi from Northampton, MA 28 AWESOME Sessions!!!
00:28:36 Janet Bernard: Florida
00:28:36 Lisa Genduso: Hello from Brooklyn, NY
00:28:38 Chonda Long: Hello from Northern VA
00:28:39 LeAnna Deveaux-Miller: Good Evening: From NEW PROVIDENCE, THE
BAHAMAS ...69 and working on catching up
00:28:44 Mary France Imperial: Hello from Philippines
00:28:45 Dalila Rivera: Hi from Kingsville,Tx 22 sessions
00:28:46 Christine Donnelly: Christine from Baltimore MD
00:28:47 Dee Crowell: Hello from Houston, TX!
00:28:47 Olga Kosheleva: Hello from El Paso, TX. I attended all webinars.
00:28:48 Noe Eugenio: Hi from Philippines!
00:28:48 Jolene Perkins: Good evening from Lake Charles, LA.
00:28:49 Lance Brauchla: Hi from IN!
00:28:52 Honey Sacro Swem: Hello from Redlands, CA
00:28:57 Nicole MacNeil: Saratoga NY
00:28:57 Jonathan Marcovitz: Greetings from Fort Lauderdale
00:29:01 Josephine Romero: Hello from Dallas, Texas.
00:29:03 Wanda Gatcomb: Hello from Maine
00:29:16 Nora Marasigan: Hello from Philippines.
00:29:17 India Puch: India from Columbia SC day 64.
00:29:18 John Sasko: Just came back from Bath Maine!!
00:29:31 ERNEICE JACKSON: Hello from Missouri!
00:29:39 George Litman: George Litman, Prof Math Ed, National Louis Univ in
Chicago
00:29:41 Betty Stallings: Hello from Portsmouth, VA
00:29:51 Bill Hudson: Hello from Fountain Inn, SC
00:29:53 bonnie manzon: left coast
00:29:59 Lisa Marie O'Reilly: Hello from Jersey
00:30:05 Michael Gougis: Hello from Chicago
00:30:14 Mary Ann Keiser: New Jersey
00:30:36 Paul Bailey: Hello for Long Island
00:30:36 Rachell Scott: Hello from Maryland!
00:30:48 Cindy Bryant: Please set your chat to "All panelists and
attendees" so everyone can see your posts.
00:30:53 tracey simmons: Hello from NY
00:30:55 Nikesha Harris: Hello from Miami
00:31:00 Galaxy J2 Core: Hello from Philippines
00:31:00 Margarito Valdez: Hello from Illinois, USA

00:31:18 Eric Von Valdez: Hi from KSA
 00:31:20 Bernita Johnson: Hey Betty Stallings
 00:31:22 Rose Hutcherson: Hello from NY
 00:31:39 roya basu: Hi from NJ
 00:31:44 Cheryl Ann Doyle E Barran: hello from the bronx
 00:31:59 Darvin Best: Greetings from Fredericksburg, VA!
 00:32:20 Barbara Lambert: Hi from Columbus, Georgia
 00:32:21 Mark Phipps: We are two weeks in already
 00:32:27 Cindy Bryant: Please set your chat to "All panelists and attendees" so everyone can see your posts.
 00:32:41 Barbara Post: Hi from Orange, CA
 00:32:42 Walter Shaner: Good morning from Auckland, New Zealand!
 00:33:13 aurora gonzales: hi! goodmorning from Philipppines
 00:33:17 belkis ceri: Hi from San Jose ,Ca and last two day for school ;) so excited
 00:33:30 Kathy Rubendall: Hello from Hoboken, NJ
 00:33:34 Shonel Fraser: Hello from NYC
 00:33:42 Aya Zvaigzne: Kindest regards to all, from Nashville, TN
 00:33:45 Hanan Matari: Hello from IL
 00:34:04 Melanie Dickson: There are a lot of words along with images
 00:34:07 Aya Zvaigzne: I love pictures.
 00:34:15 Pauline Oji: Hello from Baltimore MD
 00:34:15 Emily Kavanagh: Numbers
 00:34:19 John Sasko: Busy pages - lots of text
 00:34:20 Chrissy Siddons: A lot of words in the second two
 00:34:20 Barbara Post: Some kind of graphic in each one.
 00:34:20 Mary Ann Keiser: I see models on page 3
 00:34:20 Amy Cole: Increasingly more visual
 00:34:21 Amy Haramut: page 2 is very wordy
 00:34:21 Debbie Meaney: More writing to less writing going left to right.
 00:34:21 Yvette Davis: Models and charts
 00:34:22 Liz Waterston: A progression from boring simple math ->math in action
 00:34:22 Christine Donnelly: lots of words
 00:34:22 Natasha Gambarov: Word problems
 00:34:22 Wanda Parker: They all have numbers
 00:34:23 Vanessa Stokes: 3 worksheets some with pictures
 00:34:23 Jaime Higgins: Very wordy and technical looking.
 00:34:23 Sharon Black-MacKinnon: A lot of numbers and words
 00:34:24 Bill Hudson: many digits multiplied by single digit
 00:34:24 Linda Koval: Page 1, procedure problems and two word problems.
 00:34:25 Maria Padiernos: inclined surfaces
 00:34:25 Andrew Richman: From procedural on the left to more authentic problem solving on the right
 00:34:26 Kathy Rubendall: Third example seems the least structured
 00:34:26 Lisa Galanes: Numbers, Words, Pictures
 00:34:27 Susan Weiss: Too much on a page and lots of repetition of same problem
 00:34:28 Paul Bailey: Notice the visuals on the last one vs excessive text on the other ones

00:34:29 ERNEICE JACKSON: tables and pictures

00:34:29 Janet Bernard: numbers, pictures and images

00:34:30 Lindsay Tasker Barker: I notice that there are 3 separate activities and visuals

00:34:31 Bryan Duffey: The third page looks like it's the accessible and interesting.

00:34:31 Linda Koval: Page 2 Lots of words.

00:34:31 Kendra Edwards: Practice and then application on page on the left

00:34:32 Aya Zvaigzne: word wall on page 2

00:34:32 CLARESA MANDOLA: No visuals on the middle one

00:34:33 Nicole MacNeil: The first is procedural followed by two word problems

00:34:33 Dee Crowell: 3rd page more interesting looking.

00:34:33 Moira Hallinan: Page 1- basic practice. Page 2- word problems Page 3- explain how

00:34:34 Jolanta Sobolewska: practice worksheet and word problems

00:34:34 Susan Garland: traditional math, tables, for I tures

00:34:35 Marissa Heitman: extra examples

00:34:35 aurora gonzales: pictures

00:34:38 Debra Cowan: Lots of numbers and words

00:34:39 Dewana Robinson: they all contains numbers asked to solve

00:34:39 Stacie Kyhn: More color and pictures as you move to the right.

00:34:41 Eileen Zymroz: the middle page has a lot of writing, tough for ELs. There are many pictures on the 3rd page.

00:34:41 Lance Brauchla: 1st computation, 2nd thinking process standards, #rd visuals

00:34:42 Mary Ann Keiser: making a table

00:34:43 Doris Tannenbaum: Basic Skills to Actual Understanding

00:34:43 Nicole MacNeil: the second is all word problems

00:34:43 Hanan Matari: Different problem solving and visuals

00:34:43 Maria Dolores Estravez: Numbers, words, table, pictures

00:34:44 Maura Langan: calculation, word problems, pictures

00:34:45 Melanie Dickson: Headings and subheadings

00:34:47 Gloria Flores: Problem solving 2nd page

00:34:47 Monica Balroop: Visuals great in the third pic.

00:34:49 Ratu Ilma Indra Putri: Number, problem solving, pictue

00:34:50 Jen McFall: The first one is largely drill. The other two look like more problem solving.

00:34:50 Donna McClue: words and pictures

00:34:52 CORRINE TERRELL: The format is overwhelming for students who struggle with math.

00:34:54 Laurie Walker: From left to right rote problems a few word problems, lots of words, more thought needed

00:34:54 Randolph Chapman: they go from more abstract to less abstract

00:34:55 Linda Himes: computation first followed by a few word problems

00:34:59 Carolyn Diamond: Starts with computation as move to the right see diagrams then ask to solve

00:34:59 Linda Koval: Page 3 Pictures and words using Solve and Reflect.

00:35:00 Justin Klinger: Left to right. plain math no context, problems with context, no picture,

00:35:04 Gloria Flores: Drill and practice 1st page
00:35:05 Barbara Lambert: Progresses from left to right--more depth
00:35:05 Cheryl Ann Doyle E Barran: computation, problems with table, ps
with visuals
00:35:10 Ansonia Means: Problems....computations, word problems
00:35:12 Mariella Cacho: work sheet and word problems,
00:35:15 Kathleen McFadden: Third looks more interesting.
00:35:18 David Barnes: Handout for tonight's session is at
https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/Aug18WebinarHandout.pdf

00:35:20 Jolene Perkins: gradual visualization of math.
00:37:36 Aya Zvaigzne: A Plus Star for the resources handout
00:38:43 Carmelita Nalzarro: Hi from JEDDAH, SAUDI ARABIA
00:39:04 Cindy Bryant: Hi Carmelita!
00:40:21 Mohamed T: Greetings from Mohamed, CT
00:41:25 Lorie Huff: Remember to change the chat delivery from all
panelists to all panelists and attendees so your comments will be seen by all
participants.
00:41:52 Carol Watson: greetings from FCPS in Reston, VA

00:42:18 Jonathan Tally: Greetings, Jonathan from Liberia
00:42:18 Donna McClue: Greetings from SLIDELL, Louisiana
00:42:18 Amaliah Nisa: hello greetings from West Java, Indonesia!
00:42:45 Amaliah Nisa: 6 am here :)
00:43:34 Karen Tooman: Did students in the 1920s ask "When am I going to
use this?"
00:43:45 Lorie Huff: Remember to change the chat delivery from all
panelists to all panelists and attendees so your comments will be seen by all
participants
00:43:54 Karen Tooman: Everyday!
00:43:56 Cindy Bryant: Welcome to all of you who have joined Day 79!
00:44:31 Rosalind Brown: Rosalind BX, NY
00:44:49 Julie Thiele: I am sure they did!! Probably encouraging parents
to speak out and ask questions!
00:47:32 Dawser Al: Hi from Ann Arbor, MI
00:47:48 Cynthia Juarbe: Hi from Brooklyn, NY
00:48:07 Maureen Kishbaugh: Hello from Berwick, PA
00:48:43 Evelyn Williams: Hi from Coram, NY
00:48:48 David Barnes: Polya
00:50:26 Cindy Bryant: Think I recognize the PS diagram as one I created
and used in this
<https://www.edutopia.org/blog/mathematical-habits-of-mind-cindy-bryant.-.->)
00:50:37 David Barnes:
<https://www.nctm.org/Standards-and-Positions/More-NCTM-Standards/>
00:51:04 Cindy Bryant: These documents were game changers!!!
00:51:58 Cindy Bryant: NCTM has always been a leader and change agent!
00:52:13 Sharon Black-MacKinnon: @Cindy B the link says the page cannot be
found
00:52:19 Jacqueline Colbourne: They have been!!

00:53:12 Jeff Shih: @Sharon the link works for me:
<https://www.edutopia.org/blog/mathematical-habits-of-mind-cindy-bryant>

00:53:38 Sharon Black-MacKinnon: thank you Cindy, it worked this time:-)

00:53:52 Cindy Bryant: Thanks Sharon and Deborah!

00:53:57 Lorie Huff: Remember to change the chat delivery from all panelists to all panelists and attendees so your comments will be seen by all participants

00:54:47 Cindy Bryant: PSSM + Adding it Up! Great resources!

00:55:06 Lorie Huff: Remember to change the chat delivery from all panelists to all panelists and attendees so your comments will be seen by all participants

00:55:18 Mary Rose Portugal: knowing the steps

00:55:19 diana Stinson: Knowing the steps

00:55:21 Brian Pletsch: Steps

00:55:21 Nikesha Harris: steps

00:55:21 Melanie Dickson: Steps

00:55:23 Dumask: Know what to do

00:55:25 Dee Crowell: know the algorithm

00:55:25 Hanan Matari: knowing the steps

00:55:26 Emily Kavanagh: Knowing how things are done

00:55:26 Linda Koval: Knowing what to do.

00:55:26 Michele Conners: Know how to do the procedure.

00:55:26 Yvette Davis: to understand steps

00:55:28 Dawser Al: Steps

00:55:29 Donna McClue: steps

00:55:29 Jacqueline Colbourne: steps

00:55:29 Natasha Gambarov: understand the steps

00:55:31 Ansonia Means: stepd

00:55:31 Gloria Flores: Steps

00:55:31 Maria Padiernos: understanding and efficiency

00:55:31 Carole Bamford: order of steps

00:55:32 Amaliah Nisa: stepes

00:55:32 Randolph Chapman: Sequence of steps

00:55:33 Justin Klinger: know the steps to perform math

00:55:34 Mary France Imperial: will be guided

00:55:34 William Driscoll: Knowing the steps in a multistep proceduce

00:55:35 Lance Brauchla: number sense associated with the steps

00:55:35 Rebecca Flora: how to do it - not why but how

00:55:36 Jolanta Sobolewska: steps

00:55:36 Maura Langan: knowing what to do - how to begin

00:55:36 Mary Ann Keiser: having the mathematical insights to attack a problem

00:55:36 Evelyn Williams: Knowing the steps

00:55:37 Sharon Black-MacKinnon: the next thing to do

00:55:37 Barbara Post: like a recipe

00:55:38 CORRINE TERRELL: Steps and know what to do

00:55:40 Carol Watson: being able to know which strategy to use and how to use it

00:55:42 Wanda Parker: knowing and understanding the steps

00:55:45 Susan Weiss: Ways of using the steps and can change the step to
change for each problem

00:55:46 Todd Smallcanyon: what the next steps

00:55:47 Susan Garland: what to do / how to do

00:55:49 Michael Gougis: a strategy

00:55:53 Cherish Alberts: steps and processes

00:55:53 Walter Shaner: flowchart

00:55:53 Ana Waisanen: Knowing

00:55:55 diana Stinson: What to do

00:55:55 Lorie Huff: Remember to change the chat delivery from all
panelists to all panelists and attendees so your comments will be seen by all
participants

00:55:55 Moira Hallinan: applying the steps

00:55:56 Cindy Bryant: Thanks Jeff!

00:55:56 Carol Watson: plug n chug

00:55:56 Valentina Sorescu: using structures that are mastered

00:55:57 Maria Dolores Estravez: Knowing the steps to apply to solve the
problem

00:55:57 Hanan Matari: applying the knowledge

00:55:57 Natasha Gambarov: ability to follow

00:55:58 Chrissy Siddons: Ability to do the steps

00:55:59 Michele Conners: Being able to do the procedure.

00:55:59 Melanie Dickson: Knowing a strategy to use

00:55:59 Jennifer Dwosh: doing

00:56:00 Maura Langan: the ability to execute the problem

00:56:01 Rebecca Flora: accuracy in doing the steps

00:56:01 Evelyn Williams: Having the foundations or basics

00:56:02 Marissa Heitman: practice

00:56:03 Randolph Chapman: how to do an operation

00:56:04 Linda Koval: applying the steps

00:56:04 Dumask: following the steps

00:56:05 Susan Garland: do you know the steps

00:56:05 Mary France Imperial: ability to do

00:56:05 Paul Bailey: Being able to manipulate the steps

00:56:06 Sharon Black-MacKinnon: applying and knowing

00:56:07 Carmelita Nalzar: learning the skills

00:56:07 Jolanta Sobolewska: strategies

00:56:07 William Driscoll: Being able to change steps if necessary

00:56:07 Gloria Flores: Accuracy

00:56:08 CORRINE TERRELL: Knowing how to apply the steps

00:56:08 Jolene Perkins: applying what you know

00:56:08 Susan Weiss: Skills: finding quick answers,

00:56:10 Yvette Davis: applying

00:56:10 George Litman: perform with accuracy

00:56:12 Dawser Al: operations

00:56:13 Emerlina Binuya: accuracy

00:56:13 Sharon Black-MacKinnon: how to do the steps

00:56:14 Donna McClue: doing

00:56:15 Aya Zvaigzne: apply the knowledge to various types of problems

00:56:16 Kathleen McFadden: Knowing how to do the steps

00:56:17 Wanda Parker: applying
00:56:19 Bertha Reyes-Pond: what and how to, strategy
00:56:19 Cherish Alberts: knowing how to do it
00:56:19 Todd Smallcanyon: know the tools to use
00:56:20 Karen Tooman: Knowing when to apply a specific procedure
00:56:22 Valentina Sorescu: automatization
00:56:24 Ansonia Means: precision
00:56:25 Mary Ann Keiser: yes
00:56:25 Mary Rose Portugal: yes
00:56:27 Ana Waisanen: Demonstrate the skill.
00:56:33 Lorie Huff: Remember to change the chat delivery from all
panelists to all panelists and attendees so your comments will be seen by all
participants
00:56:33 Cindy Bryant: knowing whys and hows
00:56:34 Natasha Gambarov: applying the steps
00:56:34 Linda Koval: Know when to do what.
00:56:34 Moira Hallinan: know where the steps come from
00:56:35 Dawser Al: Make sense
00:56:35 Evelyn Williams: why
00:56:35 Dee Crowell: knowing why they do the steps
00:56:36 Dumask: able to explain
00:56:36 Nikesha Harris: what steps to use
00:56:36 Brian Pletsch: why they are using the steps
00:56:37 Liz Waterston: knowing when to apply a procedure
00:56:38 Peta-Gaye Benjamin: Understand why
00:56:38 Valentina Sorescu: know where it came from
00:56:39 Yvette Davis: know the skill
00:56:39 Mary Rose Portugal: Knowing why
00:56:39 Donna McClue: knowing why
00:56:39 Chrissy Siddons: know the why behind the step
00:56:39 Melanie Dickson: Yes, they might not know when to apply the
strategy but they might know how to follow the steps
00:56:39 Kathy Rubendall: why it works
00:56:40 Sharon Black-MacKinnon: demonstration of the skill
00:56:40 diana Stinson: They can create a problem
00:56:40 Rosalind Brown: knowing why
00:56:41 Carmelita Nalzarro: developed competencies
00:56:41 Rebecca Flora: know why they are using these steps
00:56:41 Susan Garland: how they were told to do it
00:56:41 Carolyn Diamond: It is meaningful
00:56:42 Kathleen McFadden: Know why the steps are relevant
00:56:42 William Driscoll: understand the reasoning behind the
algorithm
00:56:42 George Litman: when to use
00:56:42 CORRINE TERRELL: Comprehension
00:56:44 Wanda Parker: Know why
00:56:44 Carol Watson: why to use strategy
00:56:44 Aya Zvaigzne: apply to various types of problems
00:56:45 Stephanie Bernabe: justify and explain
00:56:45 Barbara Post: able to do it but no idea of why

00:56:45 Susan Weiss: Can apply knowledge to other applications

00:56:46 Ansonia Means: know how

00:56:48 Bryan Duffey: what the answer means

00:56:48 Maureen Kishbaugh: concepts

00:56:49 Paul Bailey: deeper understanding of why the steps work

00:56:49 Hanan Matari: apply in different ways

00:56:50 Michael Gougis: understand the concept

00:56:51 Jolene Perkins: the why of what I know

00:56:52 Michele Conners: Understanding the mathematical theory under
the procedure.

00:56:54 Mary Ann Keiser: being able to orally explain their reasoning

00:56:55 Darvin Best: Know when to use it

00:56:55 ERNEICE JACKSON: they can show by some type of procedure

00:56:58 Bill Hudson: can extend

00:56:59 Ana Waisanen: Knowing the steps.

00:57:06 Maura Langan: example - know what multiplication actually MEANS

00:57:11 Lorie Huff: Remember to change the chat delivery from all
panelists to all panelists and attendees so your comments will be seen by all
participants

00:57:13 Mary France Imperial: experience

00:57:14 Jet Yeung: sorry I am late--Jet from Henderson Nevada

00:57:15 Mary Rose Portugal: Speed and accuracy

00:57:24 Jennifer Dwosh: Multiple situations/problem types

00:57:26 Linda Koval: More than one way

00:57:27 Dumask: able to use in different situations

00:57:27 Randolph Chapman: multiple ways

00:57:27 Rosalind Brown: more than one way to do it

00:57:27 Kathleen McFadden: different approaches

00:57:27 Kendra Edwards: Can use a variety of procedures

00:57:28 Susan Weiss: Is willing to see many approaches

00:57:28 Sharon Black-MacKinnon: many approaches

00:57:28 Yvette Davis: more than one way

00:57:29 Rebecca Flora: apply the procedure to an unfamiliar situation

00:57:29 Cindy Bryant: different ways to solve

00:57:29 Natasha Gambarov: adapt to change

00:57:30 Jolanta Sobolewska: solve different ways

00:57:30 Evelyn Williams: Solving their way

00:57:30 diana Stinson: They could solve multiple

00:57:30 Carol Watson: connect between strategies

00:57:31 Kathy Rubendall: can evaluate and change course

00:57:31 Nikesha Harris: know different ways to solve

00:57:32 Valentina Sorescu: knows what tools to use and when

00:57:32 Bonnie Angel: multiple approaches

00:57:32 Bryan Duffey: know more than one way to solve

00:57:32 Mary Rose Portugal: Use different strategies

00:57:33 Melanie Dickson: Can apply to multiple situations that might
not look the same

00:57:33 Maria Dolores Estravez: knowing how and when to apply the steps

00:57:33 Mary Ann Keiser: can apply skills to a variety of problems

00:57:33 ERNEICE JACKSON: More than one procedure

00:57:33 Dawser Al: if they change the question they can do it

00:57:33 Darwin Best: Multiple ways

00:57:34 William Driscoll: Approach the problem from different perspectives

00:57:34 Carolyn Diamond: when the details change the problem can still be solved

00:57:34 Hanan Matari: not to stock with new problems

00:57:35 Chrissy Siddons: Different applications/procedures to use

00:57:36 Paul Bailey: Able to mix it up with the steps do them backwards for example

00:57:36 CORRINE TERRELL: Being able to solve the problems in more than one way

00:57:37 Wanda Parker: different ways

00:57:38 Susan Garland: an switch from different applications

00:57:40 Maureen Kishbaugh: finding alternate ways to solve a problem

00:57:40 Michele Connors: Can choose different procedures based on the needs.

00:57:42 Gloria Flores: different ways

00:57:44 Maura Langan: Being able to use drawing, manipulation of counters, different ways to get the answer

00:57:45 Maria Padiernos: think out of the box

00:57:47 Dawser Al: solve it in different ways

00:57:53 Aya Zvaigzne: modify the procedure

00:57:54 Michael Gougis: solve when problems are varied

00:57:54 Sharon Black-MacKinnon: decision making with confidence

00:57:57 Lorie Huff: Remember to change the chat delivery from all panelists to all panelists and attendees so your comments will be seen by all participants

00:57:58 Ansonia Means: adapatability

00:57:58 Jolene Perkins: transferring the knowledge to different problems

00:58:00 Hanan Matari: take risk and try different ways

00:58:04 Mary France Imperial: capability to make it in different way

00:58:07 Ana Waisanen: knowing multiple procedures

00:58:08 Randolph Chapman: best way

00:58:09 Susan Garland: do it well

00:58:09 Liz Waterston: chose the best

00:58:09 Melanie Dickson: Speed and accuracy

00:58:10 Jennifer Dwosh: Accurate and flexible

00:58:10 Rosalind Brown: quick

00:58:11 Bryan Duffey: speed

00:58:12 Mary Ann Keiser: can get it right

00:58:13 Jolanta Sobolewska: correct answer

00:58:13 Moira Hallinan: mental math

00:58:13 Kathleen McFadden: Most effective/quickest way

00:58:13 Natasha Gambarov: accuracy

00:58:14 Nikesha Harris: the right steps

00:58:14 Maria Dolores Estravez: understanding why the step works

00:58:14 Kendra Edwards: Knows what works best for them

00:58:14 Carolyn Diamond: The quick way

00:58:15 Dee Crowell: right method first

00:58:15 Sharon Black-MacKinnon: quick
00:58:15 diana Stinson: Doing it the best way
00:58:16 Aya Zvaigzne: selecting the best procedure
00:58:17 Susan Weiss: Find way to does the minimum steps
00:58:17 Hanan Matari: being coorect and accurate
00:58:17 Chrissy Siddons: choosing the most efficient/fast way
00:58:18 Michael Gougis: short cuts
00:58:18 Yvette Davis: reliable
00:58:18 Bill Hudson: less steps
00:58:19 Darvin Best: Quick and accurate
00:58:20 Lance Brauchla: Time saving step
00:58:20 Michele Conners: Pick the procedure that is most efficient.
00:58:20 Paul Bailey: can eliminate the extraneous steps and get to the
heart quickly
00:58:21 Cherish Alberts: fastest way
00:58:21 Linda Koval: speed and accuracy
00:58:21 Cindy Bryant: most accurate and quick way
00:58:22 Maura Langan: most accurate way to get to the answer
00:58:27 Valentina Sorescu: from all structures/algorithms student is
able to choose the most efficient, best for the situation
00:58:28 Rebecca Flora: the best method
00:58:36 Ana Waisanen: Being specific.
00:58:44 Sharon Black-MacKinnon: what strategy is the best method
00:58:57 Bertha Reyes-Pond: knowing what to do
00:59:11 Lorie Huff: Remember to change the chat delivery from all
panelists to all panelists and attendees so your comments will be seen by all
participants
01:00:26 Sherri Martinie: The presentation by Jenny Bay-williams is
listed on our handout!
01:01:16 Chonda Long: Handout for tonight's session is at
https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/Aug18WebinarHandout.pdf
01:01:24 Enkelejda Limani: NGLS distinguishes between procedural from
fluency with facts.
01:02:52 Lorie Huff: Remember to change the chat delivery from all
panelists to all panelists and attendees so your comments will be seen by all
participants
01:03:52 Janet Gidding: This is a good distinction...Performers vx Solvers
01:04:22 Natasha Gambarov: I think number talks is a good way to
develop problem solvers
01:04:53 Natasha Gambarov: student-led discussions
01:05:19 Melanie Weston: I agree with number talks
01:05:19 Wanda Parker: Yes number talks are great!
01:05:31 Sherri Martinie: I agree that number talks promotes thinking
and reasoning
01:05:43 Lorie Huff: Remember to change the chat delivery from all
panelists to all panelists and attendees so your comments will be seen by all
participants
01:06:02 Lorie Huff: Remember to change the chat delivery from all

panelists to all panelists and attendees so your comments will be seen by all participants

01:06:04 Valentina Sorescu: @Sherri, do you have a link to those number talks?

01:06:08 Jennifer Pisano: yes math talk! kids love it when they realize how well they do with it

01:07:00 Karen Tooman: Lessons that involve inquiry allow students to have a "productive struggle" and allows teachers to facilitate and guide students learning by using a deeper level of questioning.

01:07:29 Natasha Gambarov: I agree Karen

01:07:37 Aya Zvaigzne: I want that picture.

01:07:51 Chonda Long: Handout for tonight's session is at https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/Aug18WebinarHandout.pdf

01:07:56 Nicole Walden: screen shot it right now

01:08:15 Julie Thiele: Number talks are AMAZING! Really encouraging students to think mathematically and listen to others' ideas.

01:08:53 David Barnes: Problem Performers Article - <https://pubs.nctm.org/view/journals/tcm/23/9/article-p550.xml?rskey=jbmfBP&result=1>

01:08:57 ERNEICE JACKSON: please email with certificates. Had to switch to phone

01:09:45 David Barnes: Celebrating 100 Years with 100 Problems Involving 100

<https://www.nctm.org/online-learning/Webinars/Details/374>

01:10:12 Natasha Gambarov: Like solving the problem backwards

01:10:22 Kina Bellah: Love #3 and #4!

01:11:29 Karen Tooman: This is one my favorite ways to create "problem solvers" in my classroom. What do you think? What do you notice? What do you wonder?"

01:11:54 Maria Dolores Estravez: "What yo notice and wonder" is a great way to have students start thinking

01:12:02 Julie Thiele: Sometimes I add to the list, What can you investigate?

01:12:08 Melanie Dickson: One avocado has a larger pit than the other

01:12:11 Lance Brauchla: difference in seed size

01:12:12 Linda Koval: One pit is much bigger than the other.

01:12:12 Natasha Gambarov: different-sized pits

01:12:15 Janet Gidding: Why?

01:12:17 Paul Bailey: Big seed small seed

01:12:21 Kina Bellah: Ratio fruit to seed

01:12:21 Ana Waisanen: The seed to the right is bigger than the one on the left.

01:12:22 Rebecca Flora: What do they weigh?

01:12:23 Melonie Smith: One Seed is larger than the other

01:12:24 Catherine Cook: size of pit and age of avocado

01:12:29 Marissa Heitman: is one organic ?

01:12:30 Jet Yeung: different sizes

01:12:31 Carol Watson: which will taste better?

01:12:36 Peta-Gaye Benjamin: I wonder if the one on the left is younger
01:12:37 Karen Tooman: Julie another question is "What patterns can you
find?"
01:12:40 Linda Koval: One has more yellow than green.
01:12:42 Jennifer Pisano: which weighs more
01:12:43 Maria Dolores Estravez: Why do they have different size of seed?
01:12:43 Yvette Davis: Which is heavier
01:12:43 Bill Hudson: bigger pit smaller size overall
01:12:46 Jaime Higgins: One looks older than the other (more brown)
01:12:47 Justin Klinger: the one on the right cost too much
01:12:47 Melanie Dickson: What is the ratio of seed to deliciousness
01:12:48 diana Stinson: Are they different brands
01:12:49 Randolph Chapman: are they from the same tree
01:12:50 Natasha Gambarov: which has bigger area?
01:12:53 Paul Bailey: big seed avocado looks smaller if they are at same
scale
01:12:54 Julie Thiele: Love the idea of patterns!
01:12:54 Ratu Ilma Indra Putri: Bigger and smaller
01:12:56 Bryan Duffey: which pit came out easier?
01:12:58 Jennifer Pisano: organic vs not organic
01:13:04 Valentina Sorescu: I wonder about the ratio of seed to avocado
content
01:13:08 Sharon Black-MacKinnon: Do they taste the same?
01:13:11 Yvette Davis: Which one do you think was planted first?
01:13:14 Carol Watson: what type of avocado? Haas or other?
01:13:22 Lorie Huff: Remember to change the chat delivery from all
panelists to all panelists and attendees so your comments will be seen by all
participants
01:13:22 Ana Waisanen: Wich one has more advocado.
01:13:36 Ansonia Means: What are the circumference sof seeds?
01:13:51 Linda Koval: Constant
01:13:53 Valentina Sorescu: What about integrating geography, type of
weather, soil, etc
01:13:55 Carol Watson: the same
01:13:57 Jennifer Pisano: size doesn't really matter
01:13:58 Catherine Cook: constant
01:13:58 Linda Koval: 70%
01:13:58 Marissa Heitman: average is about 70%
01:14:03 Brian Pletsch: around 70%
01:14:08 Todd Smallcanyon: size not matter
01:14:11 Natasha Gambarov: about the same edible percentage for
different weights
01:14:16 Maria Dolores Estravez: about 70%
01:14:32 Marissa Heitman: is that more then 100%
01:15:22 Liz Waterston: I call notice and wonder Down the Rabbit Hole in my
class Haha!
01:15:36 Cindy Bryant: Too funny Liz!
01:16:28 Barbara Post: What type are each of them.
01:16:59 David Barnes: Handout for tonight's session is at
https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars

[_and_Webcasts/Webcasts/Aug18WebinarHandout.pdf](#)

01:18:02 Amy Cole: ratios

01:18:15 Jaime Higgins: There are kids eating pizza. Some are eating cheese and some are eating pepperoni.

01:18:17 Melanie Dickson: There were kids eating pizza. Some were eating cheese and the rest were eating pepperoni. How many were eating pepperoni?

01:18:17 Janet Gidding: A group of kids are eating pizza. Most are having cheese, the rest are eating pepperoni

01:18:22 Paul Bailey: Represent by visuals manipulatives group students and act it out

01:18:35 Marissa Heitman: half some and little

01:18:42 Maria Dolores Estravez: Same as Melanie's

01:18:49 Mary Rose Portugal: How many children can happily share equal portions of the pizza?

01:18:54 Ana Waisanen: ing variables

01:18:55 Susan Weiss: Some of the kids are eating cheese and some are eating the other one. How many pizzas do you need to order?

01:19:01 Randolph Chapman: the procedure

01:19:02 Mary Ann Keiser: understanding the story

01:19:04 Janet Gidding: Define "some" "many" "the rest"

01:19:05 Darvin Best: Thanks, now I'm hungry!

01:19:06 Brian Pletsch: What your asked to solve

01:19:07 Moira Hallinan: Students asking for what they need

01:19:09 Linda Koval: There are unknown

01:19:09 ERNEICE JACKSON: variables

01:19:11 Rebecca Flora: what are they looking for?

01:19:12 Bill Hudson: what do you need to know

01:19:17 Jennifer Pisano: prior knowledge of pizza sizes, might start to split them into equal groups

01:19:19 Natasha Gambarov: can they use the picture?

01:19:20 Michael Gougis: story of ratios

01:19:20 Marissa Heitman: 50/50 are eating pizza

01:19:20 David Barnes: relationships!

01:19:22 Ana Waisanen: What about throwing variables instead of numbers.

01:19:44 Karen Tooman: What is the best number of pizzas if we only were allowed cheese pizza or pepperoni pizza for an entire class?

01:19:48 Maria Dolores Estravez: It became a two-variable problem.

01:19:57 Carmelita Nalzarro: using variables

01:20:06 David Barnes: Handout for tonight's session is at https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/Aug18WebinarHandout.pdf

01:22:18 Janet Gidding: Which is closer $\frac{9}{8}$ or $\frac{8}{9}$? Is a great question!

01:22:56 Cindy Bryant: Robert Kaplinsky 7/23 100 Days session <https://www.nctm.org/online-learning/Webinars/Details/408>

01:22:59 Bryan Duffey: Open middle problems were a new discovery for me last year. Fantastic stuff. You can apply it to any topic.

01:24:15 Jennifer Pisano: is there a resources for open middle problems?

01:24:32 Catherine Cook: project based also has an aspect of exhibiting or publishing what you learned

01:24:38 Sherri Martinie: <https://www.openmiddle.com>
01:24:49 Nicole Walden: Yes - Cindy - the open middle lesson from Kaplinsky
was great
01:25:13 Sharon Black-MacKinnon: Yes it was a wonderful webinar
01:26:51 Galaxy J2 Core: Excellent . Thank you.
01:27:10 Pamela Liegl: Sherri and Julie, a weff-prepared, useful, concise,
and great presentation. Thank you.
01:27:24 Cindy Bryant: Great presentation Sherri and Julie!
01:27:31 Karen Tooman: These are all fantastic strategies for implementing
problem solving in all math classes.
01:27:31 Mary Ann Keiser: This was great!!!
01:27:36 Mary Ann Keiser: Thank you!
01:27:43 Natasha Gambarov: Thank you so very much for this informative
presentation! Thank you as well for the resources :)
01:27:49 Nicole Walden: Thx - well done
01:27:59 Wendy Janerico: Wonderful seminar!
01:27:59 Amy Cole: Thank you!
01:28:00 Maureen Kishbaugh: Nice presentation. Thank you,
01:28:03 Rachell Scott: Thank you this is great presentation!
01:28:05 Bill Hudson: Great job with a huge topic!
01:28:07 Sherri Martinie: Thank you! We appreciate you joining us
tonight!
01:28:10 Carol Watson: Will we have access to presentation? I would like to
explore the historical content pages in more detail.
01:28:11 Stacey Monroe: Positive Reinforcement. Thanks
01:28:13 ERNEICE JACKSON: please email resources as well
01:28:15 Ana Waisanen: This was a great presentation.
01:28:22 Michael Gougis: What do you do when you elicit prior knowledge and
discover students are significantly below grade level?
01:28:23 Ana Waisanen: Thank you!
01:28:24 Rafiq Zulkarnaen: Thank Julie, nice presentation.
Thank you NCTM form Indonesia
01:28:25 Todd Smallcanyon: ThankYou
01:28:26 Catherine Cook: thank you so much !
01:28:26 Maria Dolores Estravez: Great presentation! Very informative! Thank
you for sharing these resources and strategies!
01:28:29 Cherish Alberts: Thank you so much!
01:28:30 Jennifer Pisano: Thank you!
01:28:30 Valentina Sorescu: Thank you!
01:28:32 Georgina Coffin: Thank you!!
01:28:32 Shonel Fraser: Thank you!
01:28:33 Ray Mark Cariquez: Thank you for this webinar!
01:28:42 NOURA ALSOFIANI: aamzing
01:28:43 Jolanta Sobolewska: thank you
01:28:44 Arlene Bachinela: very interesting. thank you so much
01:28:44 Sharon Black-MacKinnon: Thank you for this fantastic webinar!
Grateful to be able to be here:-)
01:28:46 Jet Yeung: Thank you very much for the information.
01:28:46 CLARESA MANDOLA: Thank you!
01:28:46 Evelyn Williams: Thank you

01:28:46 Kina Bellah: Thank you!
01:28:46 Paul Bailey: Great presentation well done thanks guys !
01:28:46 Kendra Edwards: Thank you!!! This was a wonderful presentation!!
01:28:46 Cynthia Juarbe: thank you
01:28:48 Walter Shaner: Thank you!
01:28:48 Cheryl Ann Doyle E Barran: great presentation wonderful
strategies for revamping problem solving in math, thank ladies.
01:28:50 Janet Gidding: Thank you Julie & Cherri
01:28:50 Kina Bellah: Very insightful!
01:28:51 CORRINE TERRELL: Thanks and stay safe everyone!
01:28:52 Marissa Heitman: thank you
01:28:53 Melonie Smith: Thank you
01:28:53 Tanya Landry: Thank you!
01:28:54 Gloria Flores: Thank You:)
01:28:55 Monica Balroop: Thank you: Great presentation.
01:28:55 aurora gonzales: thank you
01:28:57 Kathy Rubendall: Same to you! Thank you!
01:28:58 India Puch: Yes, thank you!
01:28:58 Yvette Davis: Thank you
01:28:59 Ana Waisanen: I will put in practice what I learned tonight.
01:28:59 Trena Wilkerson: Excellent focus on problems solving!
01:29:01 Linda Koval: Thank you. Both of you are amazing presenters!
01:29:01 Mellisha Williams: Great session
01:29:04 Daniel Irving: Thank you for this incredible presentation!
01:29:07 Josephine Romero: Thank you very much for a great
presentation.
01:29:08 Marissa Heitman: do we need to fill out a form for you
01:29:08 Mohamed T: wonderful!
01:29:11 Maria Padiernos: Thanks, I agree with you...I am excited that
it will be exciting!!!
01:29:14 Melanie Weston: thank you!
01:29:21 Ratu Ilma Indra Putri: Thank you. Great
01:29:23 Dee Crowell: Great presentation!!!
01:29:28 Diane Anderson: Thank you!
01:29:29 Aya Zvaigzne: Another GOLD STANDARD / PLATINUM STANDARD webinar.
Thank you enormously. This was incredibly useful and immediately applicable.
01:29:53 Emerlina Binuya: Thank you! Great presentation!
01:29:56 Bertha Reyes-Pond: Thank you!
01:29:59 Carmelita Nalzaro: Thank you for a great presentation. Thanks
Ms. Chonda
01:29:59 Theresa Houston: This was great. I am going to implement
notice and wondering routine immediately. Thanks.
01:30:02 Mary France Imperial: Thank you so much. Another awesome
presentation.
01:30:05 LeAnna Deveaux-Miller: Thank you for the presentation..AWESOME
01:30:11 Lance Brauchla: Thank you!
01:30:16 Emily Kavanagh: Thanks so much
01:30:20 Dewana Robinson: Thanks so much
01:30:21 Jolene Perkins: Thank you very much
01:30:24 ERNEICE JACKSON: Thank you for everything

01:30:25 Rose Hutcherson: Thank you!
01:30:30 Jonathan Marcovitz: thanks
01:30:34 Phil Nomel: Thanks a lot
01:30:34 Amaliah Nisa: thank you very much
01:30:36 Wanda Parker: great info! Thank you!
01:30:36 Chonda Long: Handout for tonight's session is at
https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/Aug18WebinarHandout.pdf

01:30:37 Justin Klinger: thank you
01:30:41 Carol Watson: cross curriculum: math & history
01:30:41 Caroline Che Nee Foy: Thank you
01:30:42 Olga Kosheleva: Thanks a lot!
01:30:44 Jorge Veloso: Thank you, it was a very good session. I loved it!
01:30:47 Donna McClue: Thank you very much for the presentation.
01:30:53 Jacqueline Colbourne: Thank you!!
01:31:02 Linda Koval: Thank you NCTM!
01:31:05 Robyn Headifen: ka pai that was an interesting session
01:31:18 Marissa Heitman: see you tomorrow
01:31:19 Lee Anne Coester: I'm Kansas proud of you two!
01:31:22 Kathleen McFadden: Thank you all for giving us such valued
infomation
01:31:24 Mary Rose Portugal: Thanks so much for a great presentation!
01:31:26 Mariella Cacho: Thanks so much!
01:31:34 David Barnes: Need access to these member-only articles and pubs?
30 Day Trial Membership at
<https://www.nctm.org/trial-membership/>

01:31:49 Chonda Long: <https://www.nctm.org/ptabook/>
01:31:50 Shaymaa Alsadoon: Thank you so much!
01:32:07 Carolyn Diamond: Thank you I can apply this and I appreciate
it.
01:32:32 Faith Peddie: Here is some more information on this month's issue
of MTLT
https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Webcasts/MTLT_eTOC_Aug.pdf
01:32:33 MAYLYN MAGNO: Thank you so much..
01:32:59 Cindy Bryant: Principles to Action is a must for every
professional library!
01:33:22 Trena Wilkerson: Agreed Cindy!
01:33:53 Trena Wilkerson: Check it out! <https://www.nctm.org/pta/>
01:34:00 Marissa Heitman: no survey?