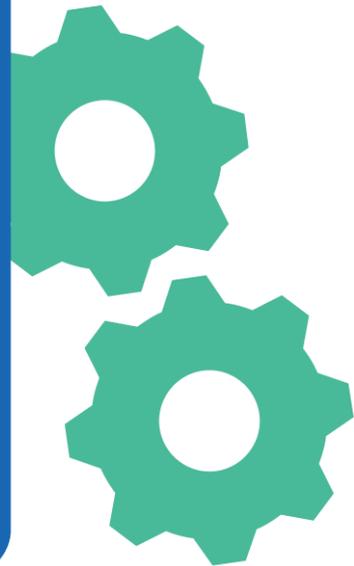
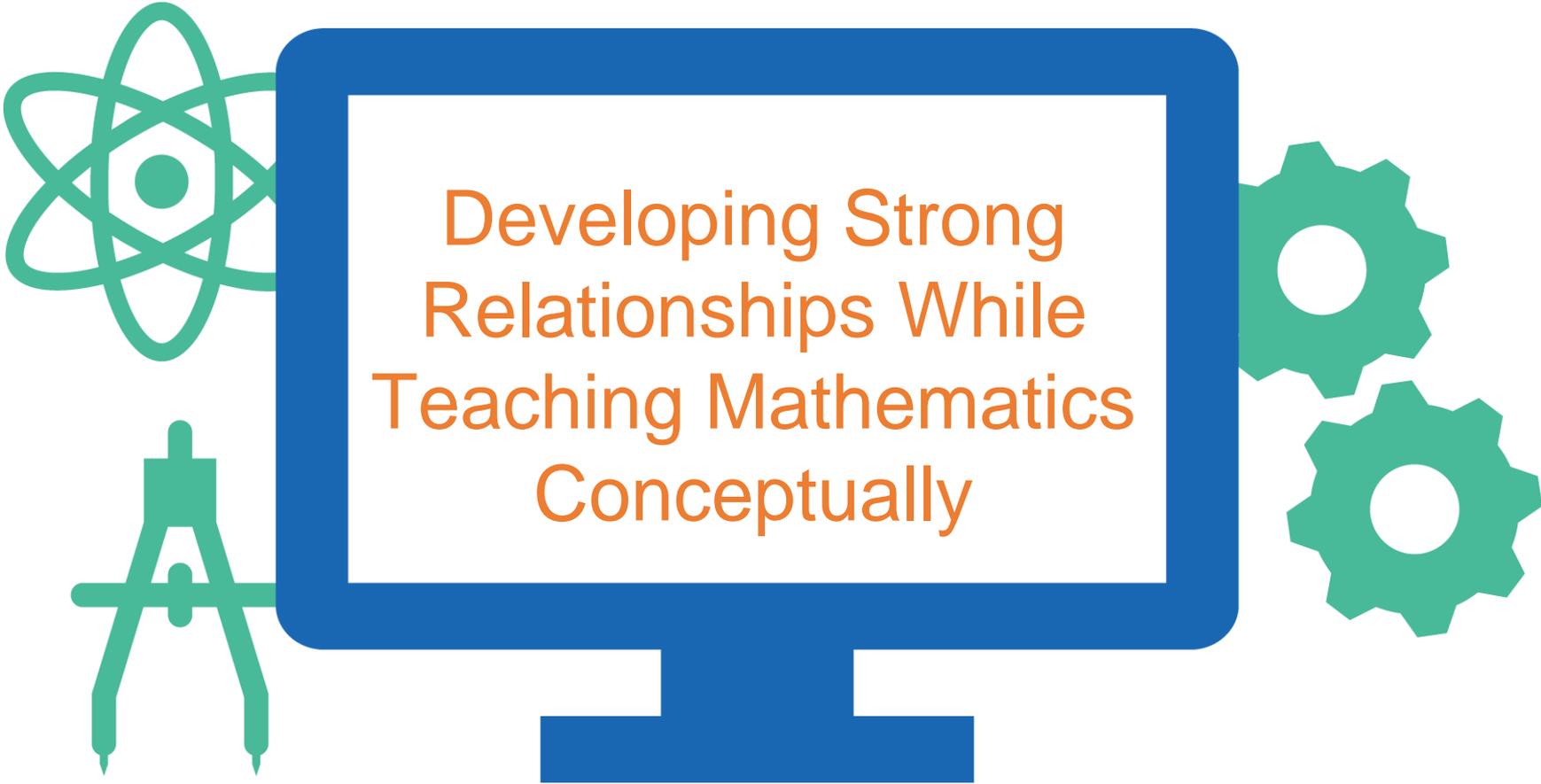


RLC

Remote Learning Chats





Developing Strong Relationships While Teaching Mathematics Conceptually



REMOTE LEARNING CHAT



Starting the School Year:
Developing Relationships while
Teaching Math Conceptually (K-5)
July 14, 2020

Glad you
are here!

Melanie Martinez – 1st Grade Teacher

Stacy Salter – 5th Grade Teacher

Walnut Creek Elementary School
Henry County Schools



Collaborative Partners:

Katie Breedlove - District Math Instructional Lead Teacher
Marga Kirschner - Title I Math Coach



TOPICS OF DISCUSSION

01

Developing Relationships Virtually

Teachers can continue to connect with students despite the distance between them.
(Zimny, 2020)

02

How to teach math conceptually

Requires discourse that promotes reasoning and problem solving.
(NCTM, 2014)

03

Q&A

Open up to questions – post in CHAT box



“Often people will make the mistake of looking at online learning from the perspective of what's available in terms of technology and then figuring out how to use that as a teacher. It's more important to look at how **YOU** want to teach and what's out there to help you do that.”



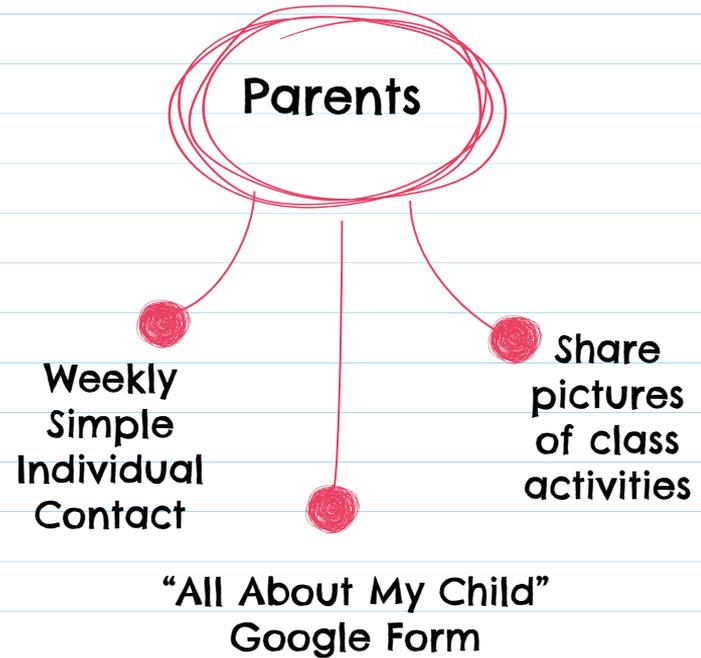
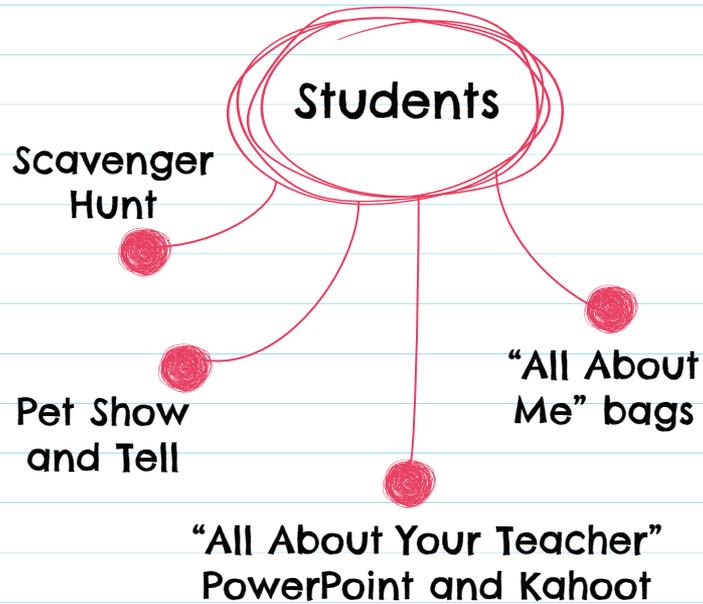
—Mike Flynn (2020)

01

Developing Relationships Virtually

Maintain strong
relationships and
support students' needs

Building Relationships





Welcome to Ms. Martinez's 1st Grade Class!

Tell Me About Your Child

Child's Name *

Short answer text

All About Me Bags

Welcome to 1st Grade!

I am Ms. Martinez and I'm excited to have you in my class this year! To help us get to know each other, please fill this bag with small items that tell about things you like.

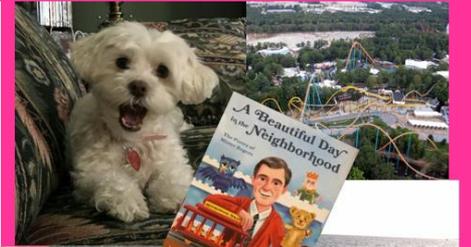
You may use:

- small toys
- pictures of your family
- drawings
- anything small enough to fit in the bag that tells about you!

Ask your family to help find appropriate invaluable items for this activity. You may bring your bag any day this week.

I can't wait to learn more about you!

Ms. Martinez

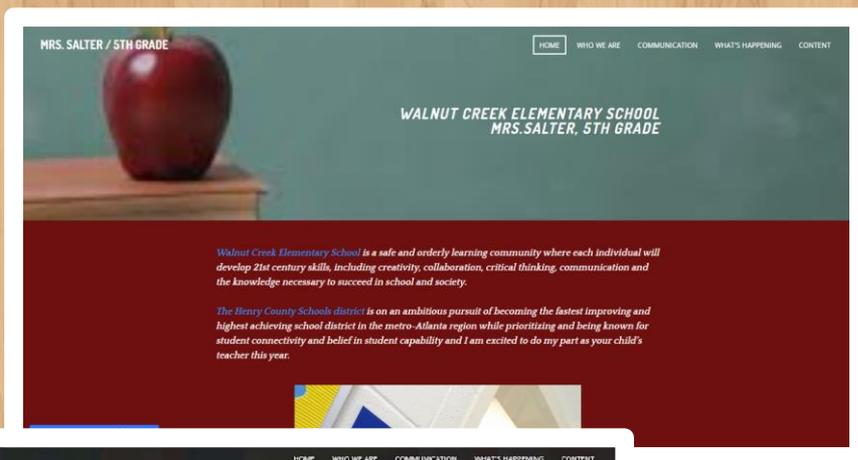


Getting to Know You Activities

- **Google Form - Parents complete**
 - **Interests / Personality / Concerns**
 - **Favorite color, food, super hero, princess, etc.**
- **All About Me Bags: Model / Kahoot!**
- **Remote Learning Brain Break - Scavenger Hunt**

End of the Year Scavenger Hunt

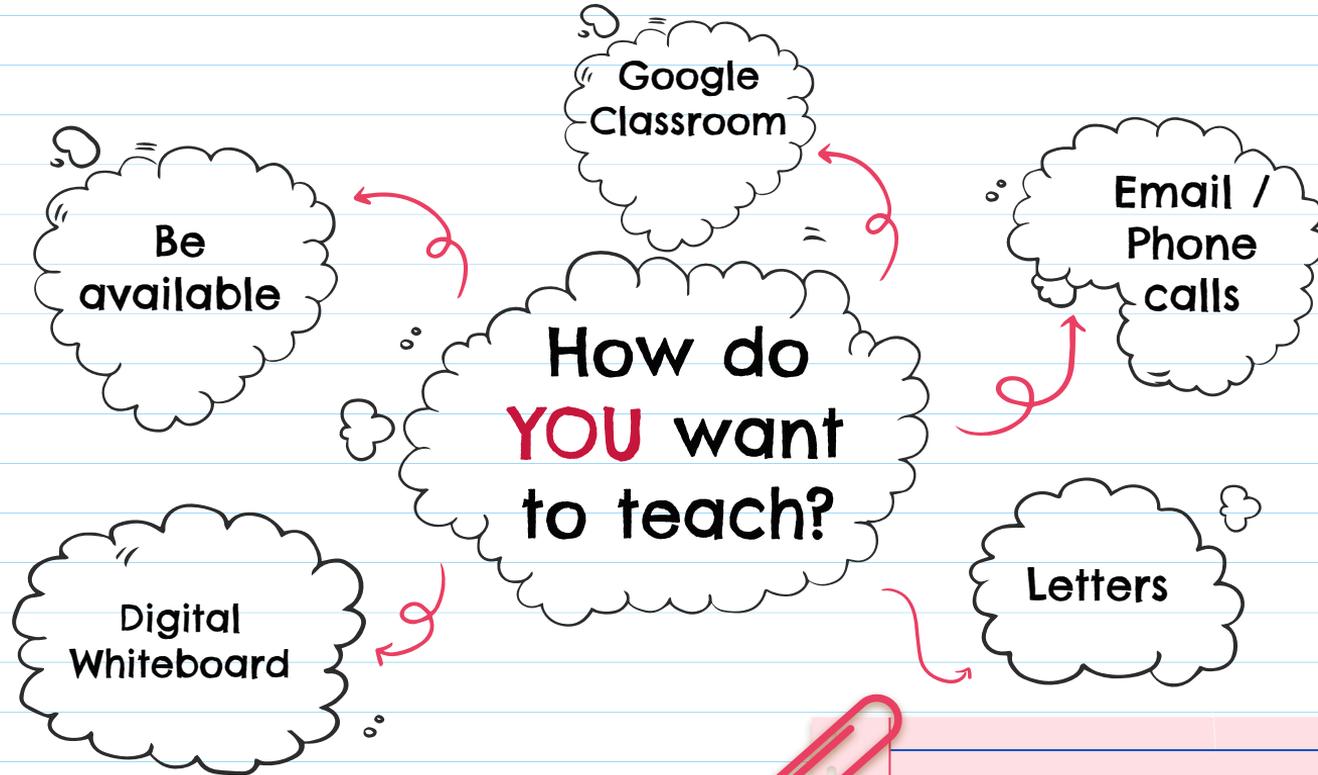
- ▶ Find something:
 - ▶ Purple
 - ▶ Soft
 - ▶ Round
 - ▶ An object with 3 colors



Make connections through a website



Keys to Connectivity



<https://bit.ly/TechnologyResourceList>

Developing Relationships Virtually

Pledge

Maintain sense
of normalcy

Virtual Norms

Develop community
agreements to guide
virtual class interaction
(Henry, 2020)

Morning Message

Helps students stay
connected to you and
their classroom
(Responsive Classroom, 2020)

Daily Check-Ins

maintain sense of
belonging,
significance, and fun
(Responsive Classroom, 2020)

Build Trust!

Be in contact with
parents and students
daily.

Clear Expectations

Including cultural
strategies is key to
creating true learning
community
(Henry, 2020)

padlet

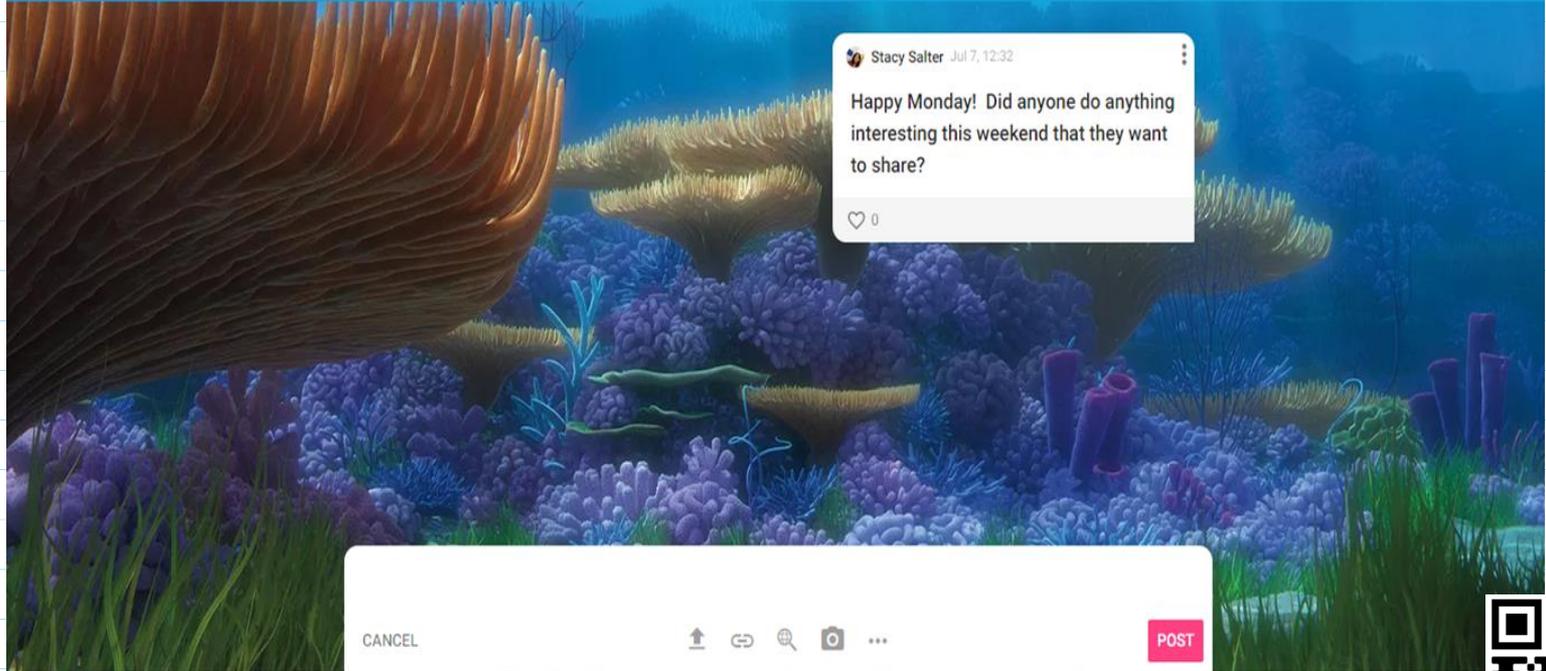
REMAKE SHARE



Stacy Salter 3d

Our Daily Check-In

Each student posts a response to a question as posed by the teacher. Each classmate is to respond positively to two others.



Stacy Salter Jul 7, 12:32

Happy Monday! Did anyone do anything interesting this weekend that they want to share?

0

CANCEL

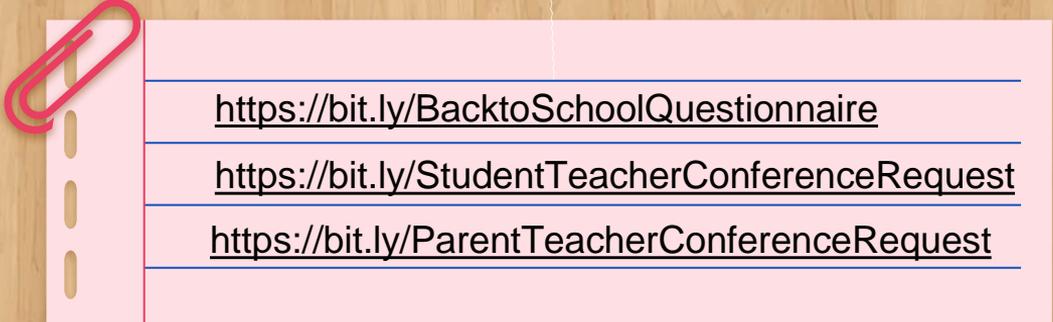


POST





Suggestions for Other Ways to Connect Using Google Forms



<https://bit.ly/BacktoSchoolQuestionnaire>

<https://bit.ly/StudentTeacherConferenceRequest>

<https://bit.ly/ParentTeacherConferenceRequest>



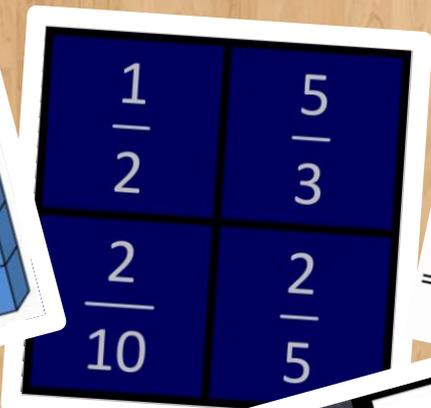
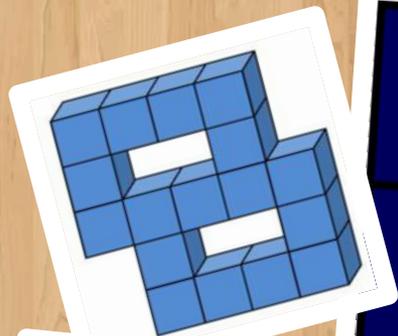
How to teach math conceptually

Establishes the
foundation and is
necessary for developing
procedural fluency
(NCTM,2014)



02

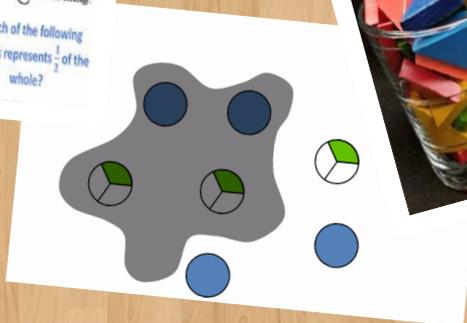
Building Rigor AND Relationships



$$\begin{array}{l} \square + \square + \square = \\ + \\ \square + \square + \\ = \square + \square + \square \end{array}$$

I'm thinking:
I have an answer and a strategy!
I agree.
I have more than one strategy.

Which of the following models represents $\frac{3}{4}$ of the whole?



Clue #1
The number is less than 70.

Clue #2
The answer does not include the digits 1, 3, or 5.

Clue #3
The answer is an odd number.

Clue #4
The answer is a prime number.

- Cube Conversations
- Esti-Mysteries
- Splat!
- Which One Doesn't Belong
- Number Talks
- OpenMiddle

Provide tasks that include thought-provoking puzzles where there are no answers provided and there are many different entry points. This promotes discourse and allows students to see things from another's perspective.

Number Talks

Dot Cards

- Fosters conceptual math thinking
- **SMP 3** - Construct viable arguments and critique the reasoning of others
- **SMP 6** - Attend to precision
- Turn and Talk – students typically talk with each other but can talk with a family member at home.

$$9 + 9 =$$

$$9 + 10 =$$

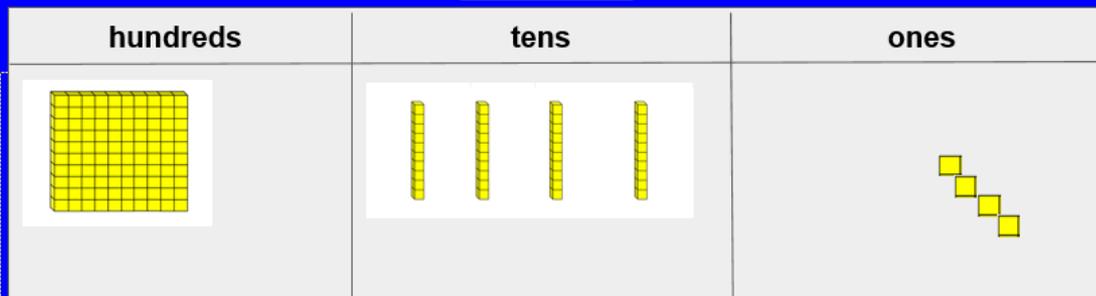
$$9 + 11 =$$



Nifty Numbers

- Daily number knowledge and number recognition activity
- Different ways to represent the number of school days
- Adapted to remote learning
- **SMP 4** - Model with Mathematics

Day 144



How many **GROUPS** of 100?
of 1?

1

What's the **VALUE** of 1 in the
hundreds place?

100

How many **GROUPS** of 10?

4

What's the **VALUE** of 4 in the
tens place?

40

How many **GROUPS**

4

What's the **VALUE** of 2 in the
ones place?

4

Represent Today's Number Using Coins

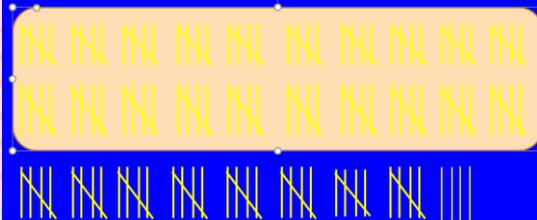


\$ 1.44



The value of a penny is.....1 cent
The value of a nickel is.....5 cents
The value of a dime is.....10 cents
The value of a quarter is.... 25 cents

Represent Today's Number Using Tally Marks



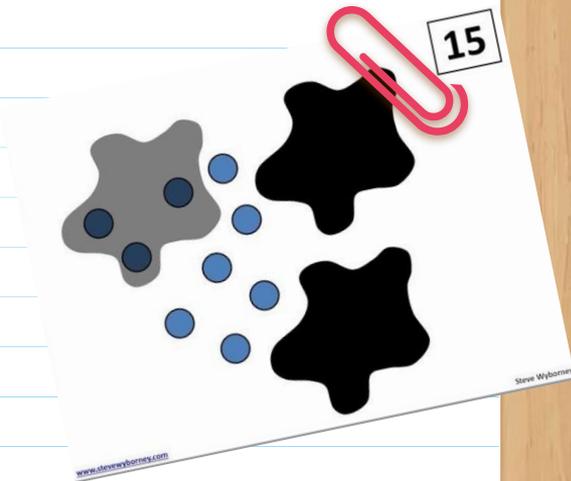
Splat!

By: Steve Wyborney

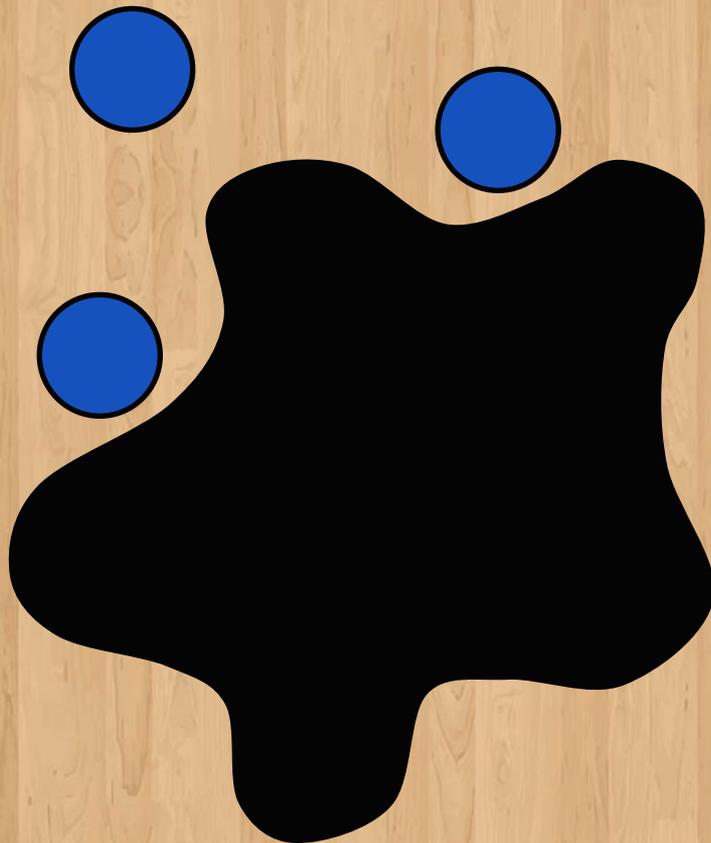
- Promotes rigor
- Solving for unknown
- Part-part whole relationships
- Students share their reasoning with others

- Part of our weekly in-class routine
- Modeled during remote learning
- Offered as an optional resource for enrichment

- **SMP 1** – Make sense of problems and persevere in solving them.
- **SMP 2** – Reason abstractly and quantitatively.



4



Doing Mathematics in the Real World

Activinspire - Studio

MGSE5G1 Meerkats*

CLASSFLOW: Connect Page 1 of 1 Best Fit

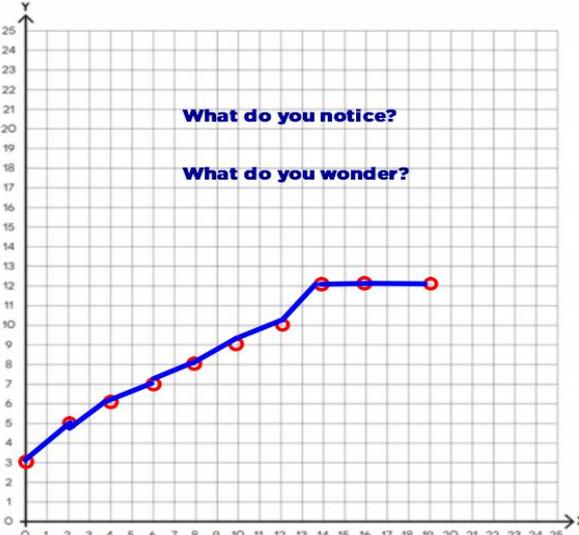
Greetings from the Kalahari Desert in South Africa! In this activity, you will learn a lot about the Kalahari's most playful residents: meerkats.

a. The following ordered pairs show the height of a typical meerkat at different times during the first 20 months of life. Graph the corresponding points and see what you can discover about meerkats. Once you have graphed them all, connect the points in the order they are given to form a line graph.



See if you can graph these ordered pairs:

- (0 months, 3 inches)
- (2 months, 5 inches)
- (4 months, 6 inches)
- (6 months, 7 inches)
- (8 months, 8 inches)
- (10 months, 9 inches)
- (12 months, 10 inches)
- (14 months, 12 inches)
- (16 months, 12 inches)
- (18 months, 12 inches)
- (20 months, 12 inches)



What do you notice?

What do you wonder?

These real-world crucial context are crucial for engaging students in mathematical modeling and for preparing students to use mathematics beyond the classroom (Felton, 2014).

<https://classroomscreen.com/>

<https://awwapp.com/>

<https://ditchthattextbook.com/online-whiteboard/>

It just
make
sense!

Connecting Conceptual Math to the Relationships

- Connect often!!
- Use multiple forms of communication
- Set virtual classroom hours
- Check in with students individually
- Communicate with parents
- Remember...virtual relationships matter

(Zimny, 2020)



Q&A

**We want to
hear from
YOU...**





**LIST
OF
RESOURCES**

<https://bit.ly/TechnologyResourceList>
<https://stacyrsalter.weebly.com>

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Mathematics Resources

Introduction		
Kindergarten	1st Grade	2nd Grade
3rd Grade	4th Grade	5th Grade
6th Grade	7th Grade	8th Grade
Coordinate Algebra	Algebra I	Analytic Geometry
Geometry	Algebra II - Advanced Algebra	Precalculus
	Calculus-Based HS Courses	All Other HS Courses
Additional Teacher Resources		

<https://www.gadoe.org/Curriculum-Instruction-and-Assessment/Curriculum-and-Instruction/Documents/Mathematics/GADOE-Remote-Learning-Supplemental-Resources-for-Mathematics-K-12.pdf>