

How many?



Molly Daley

Regional Math Coordinator

ESD 112 Vancouver, WA

@mdaley15



“We want kids running around
the classroom and bumping into
mathematics at every turn”

-Doug Clements



TED

Yesterday at 7:16am · 🌐

Here's why you should ask someone "What is 25 times 25?" during a job interview:



5 interview questions that will help you hire better people

To identify the candidates who have substance and not just smarts, here are better questions to ask.

[IDEAS.TED.COM](https://ideas.ted.com)



Like



Comment



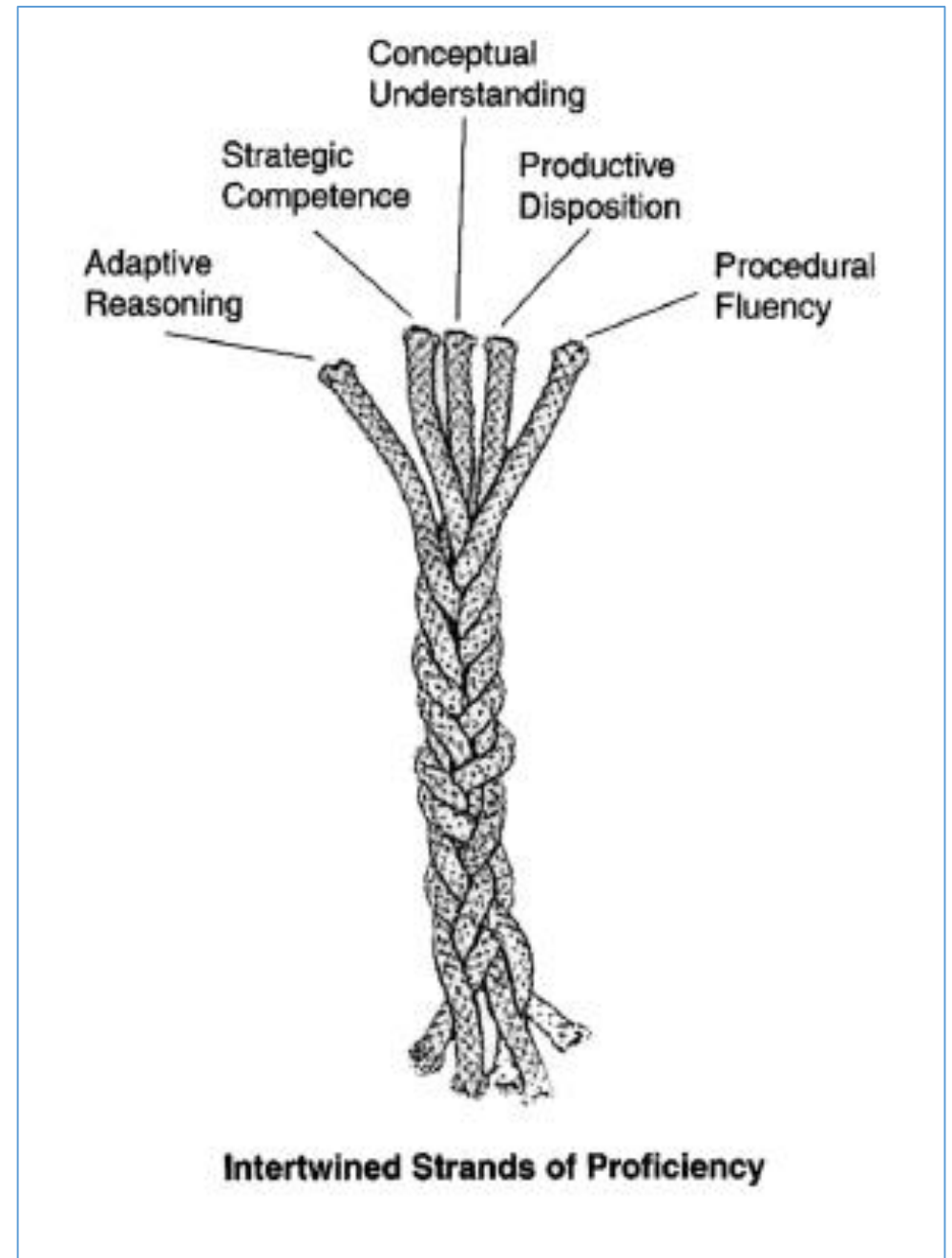
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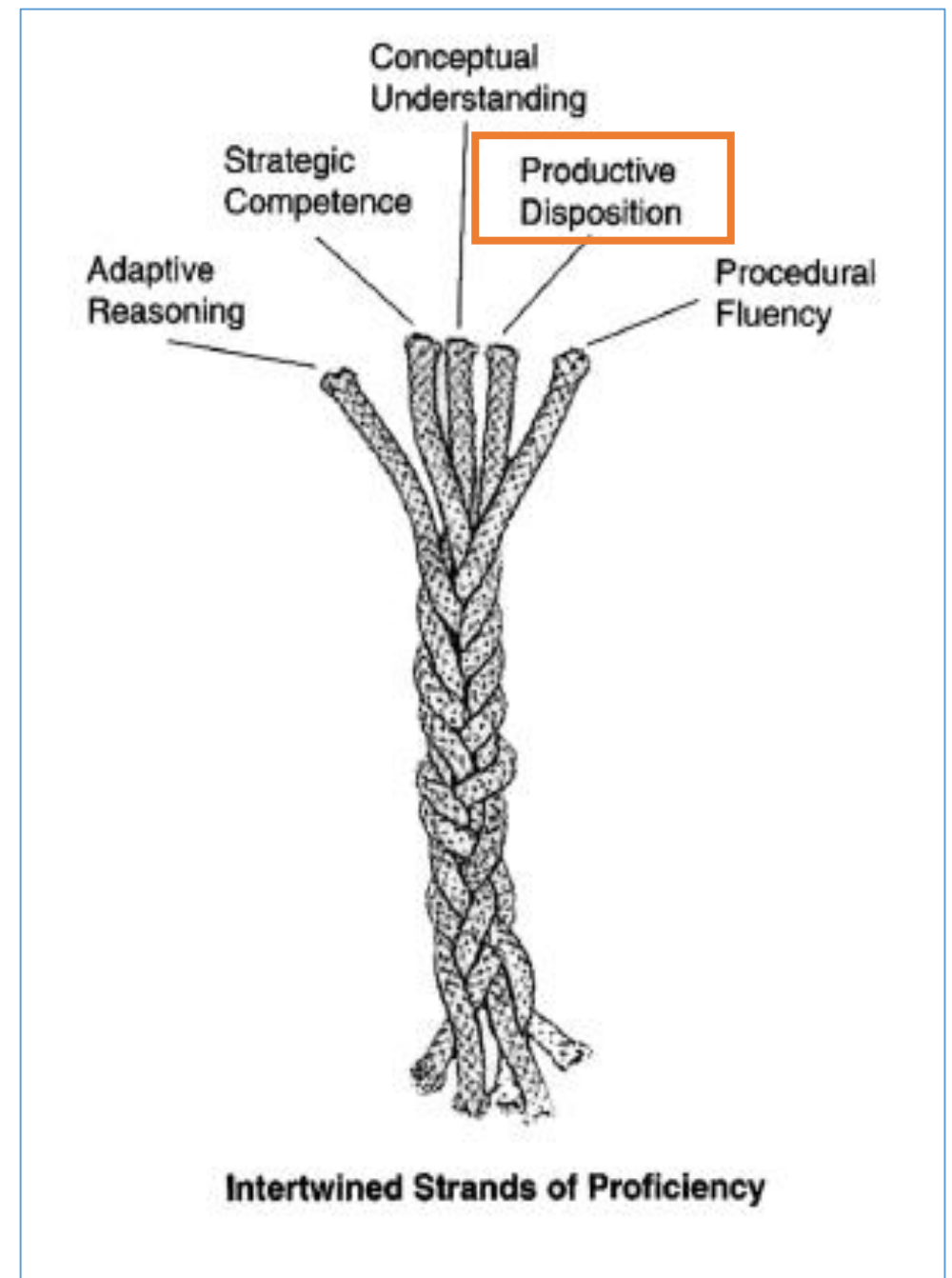
7.7K

Top Comments ▾

“For preschool children the strands of mathematical proficiency are particularly closely intertwined...They are positively disposed to do and understand mathematics when they first encounter it.”



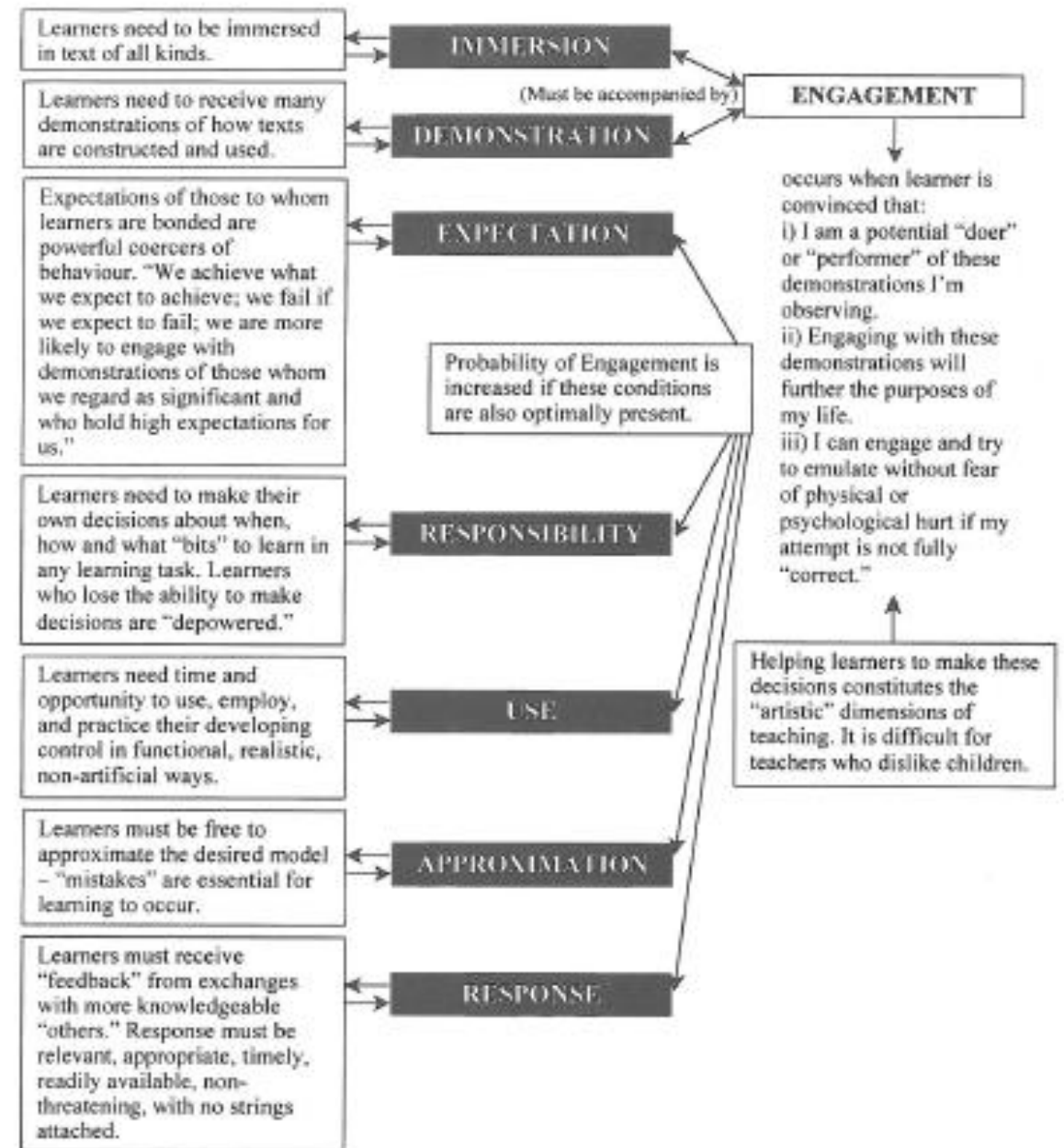
1. What characterizes a *Productive Disposition*?
2. What factors shape our dispositions?



National Research Council; "Adding It Up: Helping Children Learn Mathematics." 2001.

“Mathematically proficient people believe that mathematics should make sense, that they can figure it out, and that becoming mathematically proficient is worth the effort.”

Cambourne's Conditions of Learning



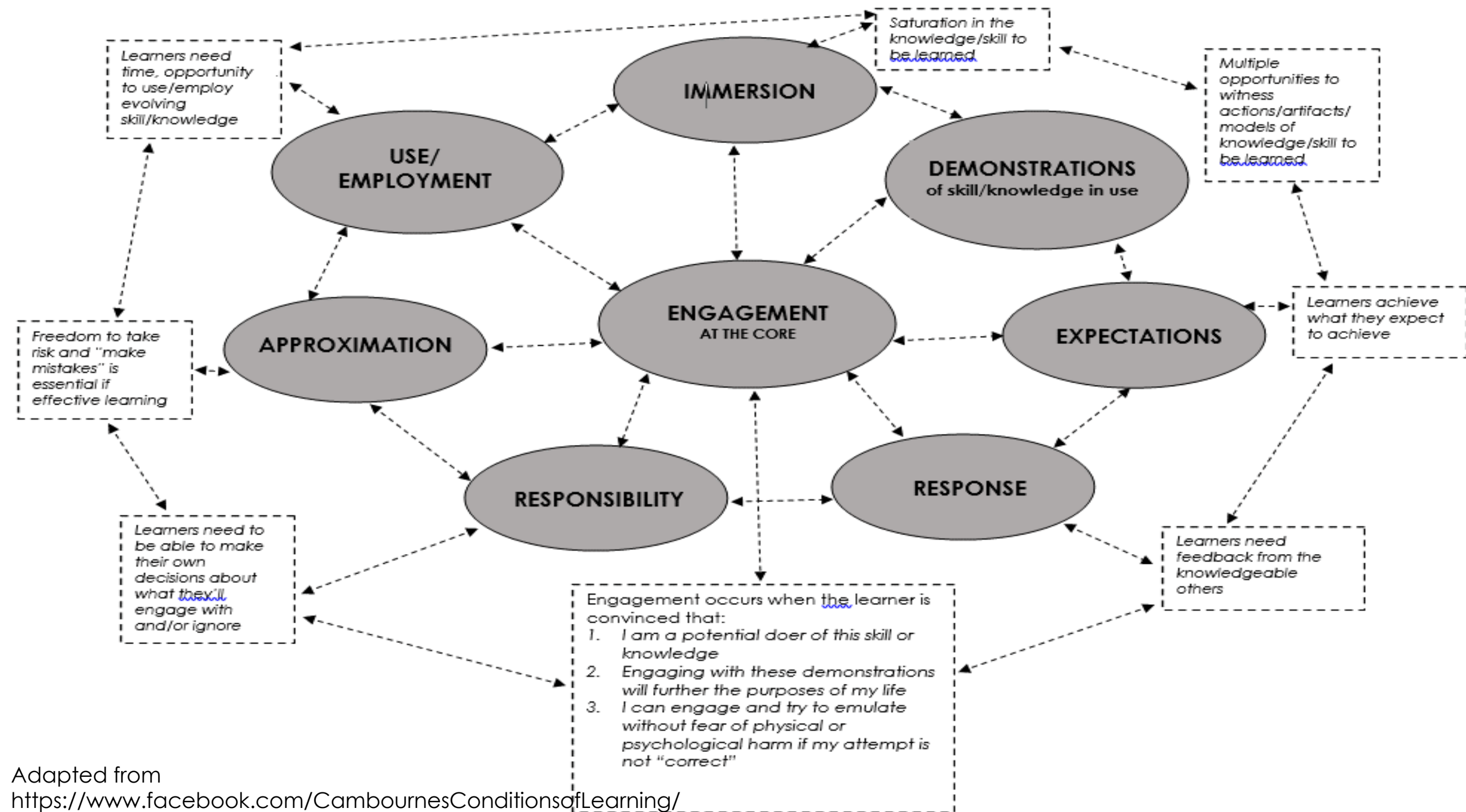




Photo by Aleksandar Popovski on Unsplash

Which of these
conditions could we
strengthen in our early
math experiences?

Immersion

Demonstration

Expectations

Responsibility

**Use
(Employment)**

Approximation

Response

Engagement

Engagement occurs when learners are convinced that:

- they are potential doers or performers of these demonstrations;
- engaging with these demonstrations will further the purposes of their lives;
- they can engage and try to emulate without fear of physical or psychological hurt if their attempts are not fully correct.



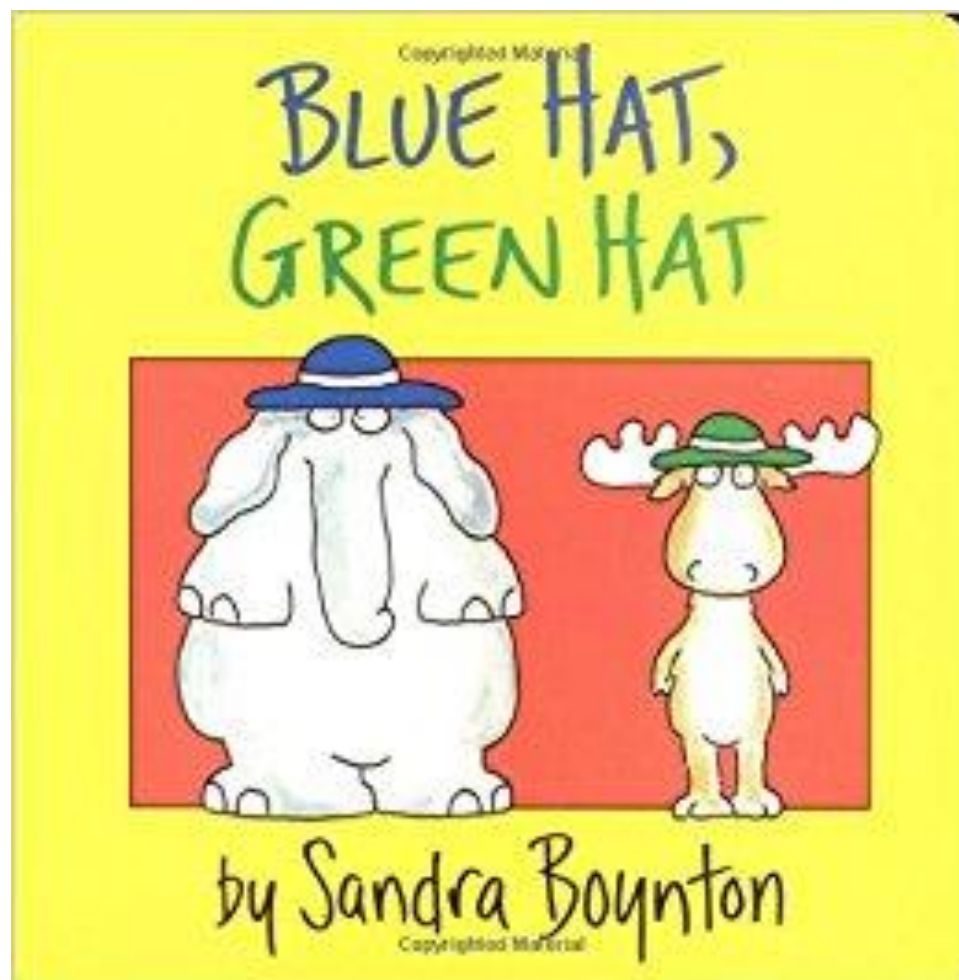
PROMOTE

- **IMMERSION** in, **DEMONSTRATION** & **USE** of mathematical thinking
- Productive **RESPONSE** to mathematical **APPROXIMATION**
- A shift in **EXPECTATIONS** & **DISPOSITIONS** of mathematics learners & their grown-ups

VIA SUPPORT TO...

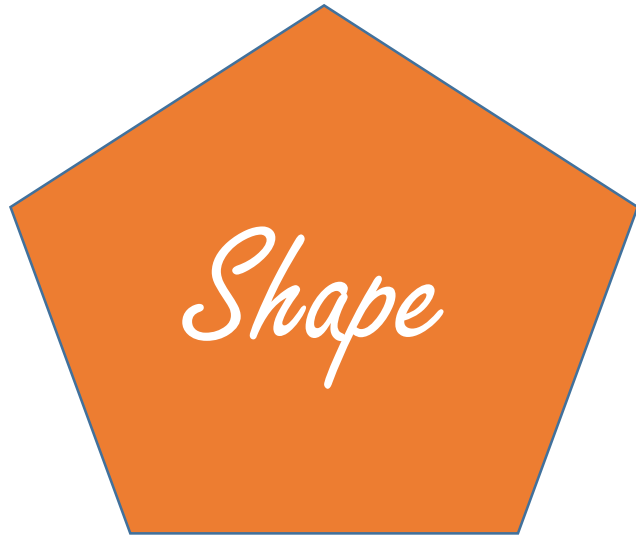
1. **NOTICE** mathematical moments
2. **ENGAGE** in mathematical moments
3. **PROMPT** math thinking & talk

Notice Mathematical Moments



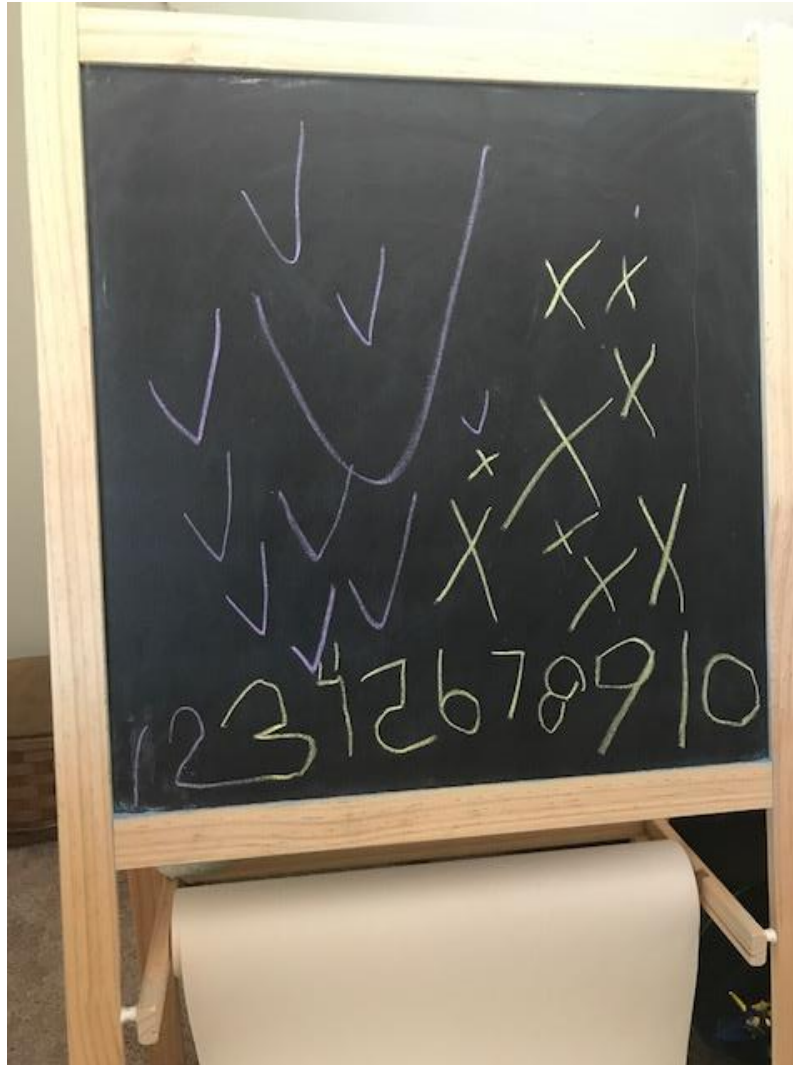
POSITION

quantity



SIZE

Engage in Mathematical Moments





Prompt Mathematical Moments



Photo by [Kelly Sikkema](#) on [Unsplash](#)



Lather, Rinse & Repeat





Molly Daley (@mdaley15)

How Many?



KinderWonders (@KinderWonders)

How Many?

*How
Many?*





Ellen Degeneris (@TheEllenShow) Cupcakes from Kerry Washington (@kerrywashington)



Tawnya Brooks added 3 new photos.

October 3 at 4:49pm · 🧑🏻



Eggs and garden harvest!



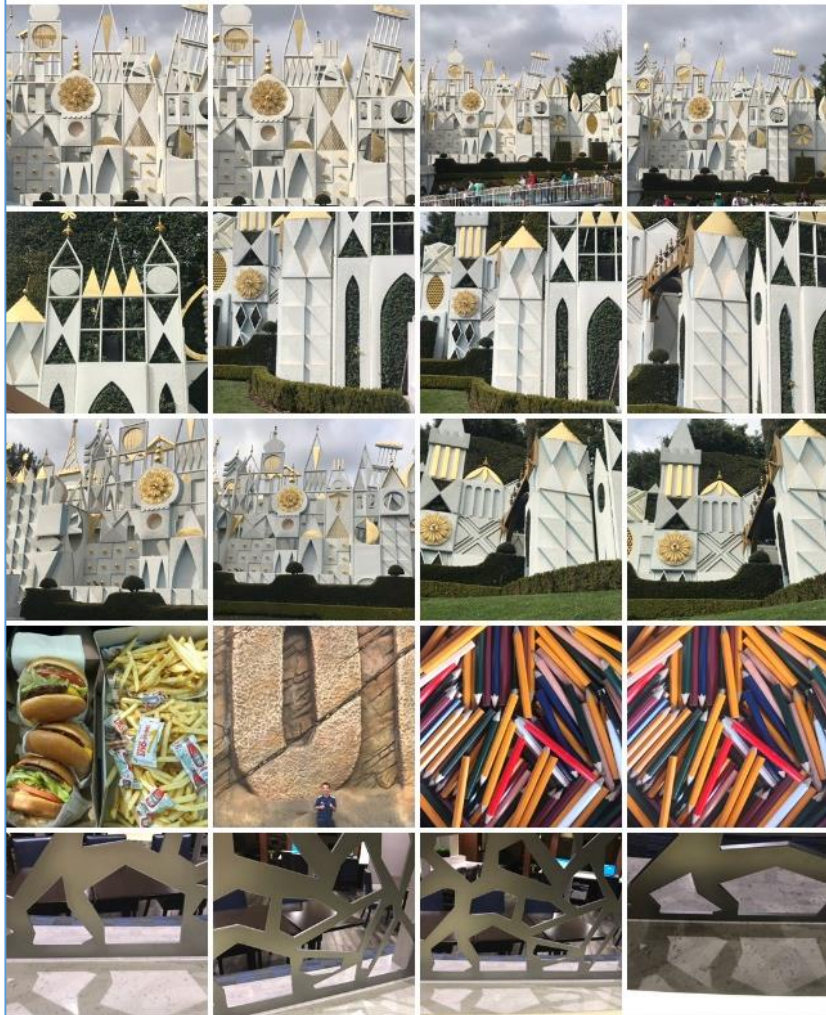
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Vacation

Apr 2 - 4



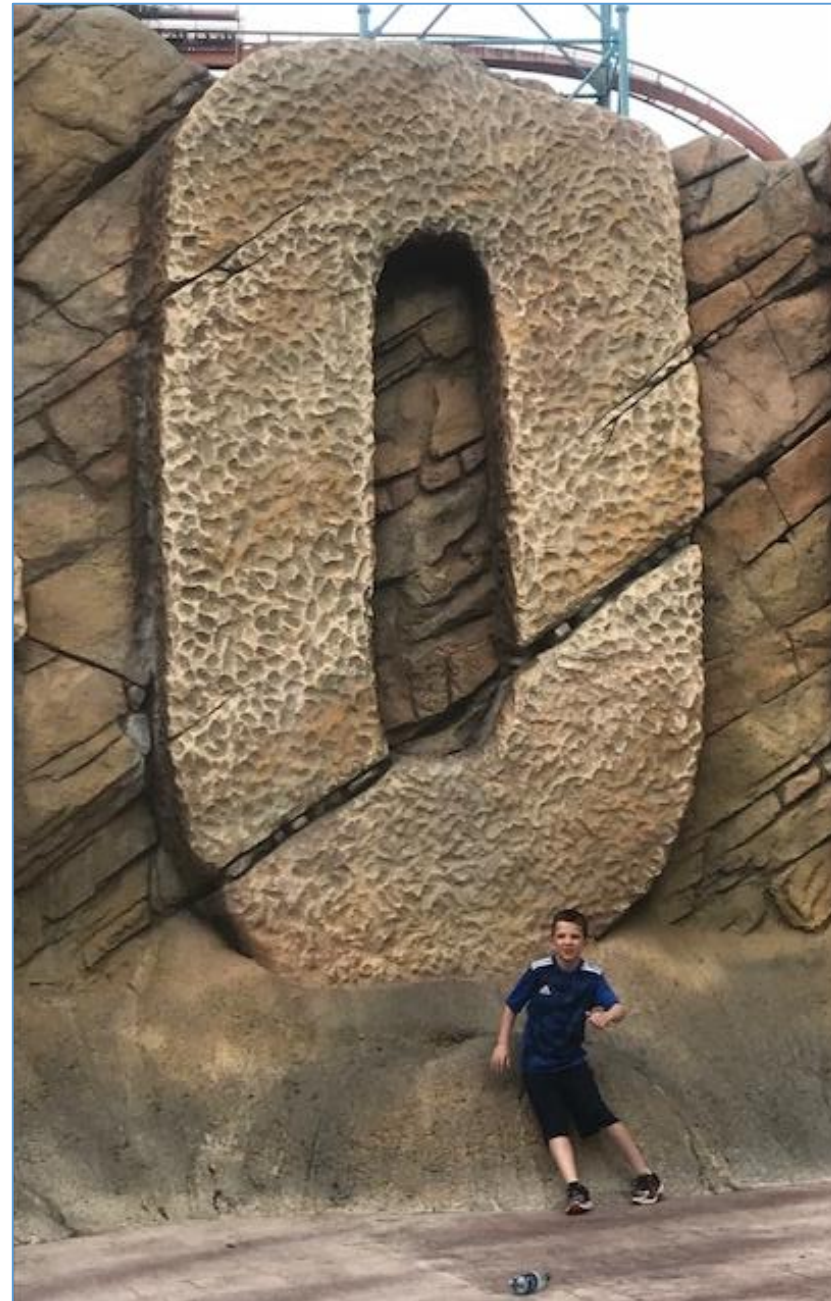
Photos



Memories



Albums



Can you find...?



Can you find...?



Photo by [Annie Spratt](#) on [Unsplash](#)





How many?

- Open-ended
- Open-middle
- Not answer-getting

Can you find...?

- Open-middle
- Not answer-getting

Number Talk Images

Un projet collaboratif qui a pour but de recueillir des images intéressantes qui peuvent servir comme point de départ pour des jasettes mathématiques au sujet des nombres.

A collaborative project dedicated to gathering interesting images to be used as a launching point for Number Talks.

CONTRIBUER | CONTRIBUTE



<https://www.stenhouse.com/content/how-many>

Which One Doesn't Belong?



Which One Doesn't Belong?

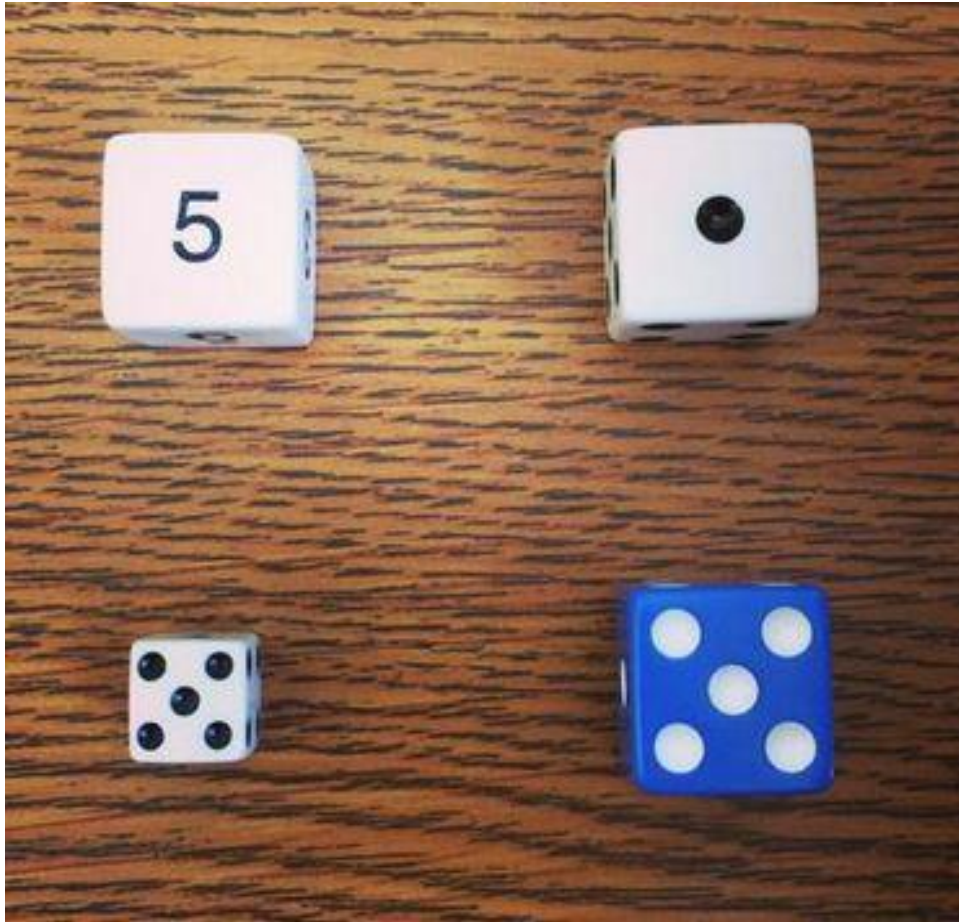


<http://sites.stenhouse.com/wodb/>



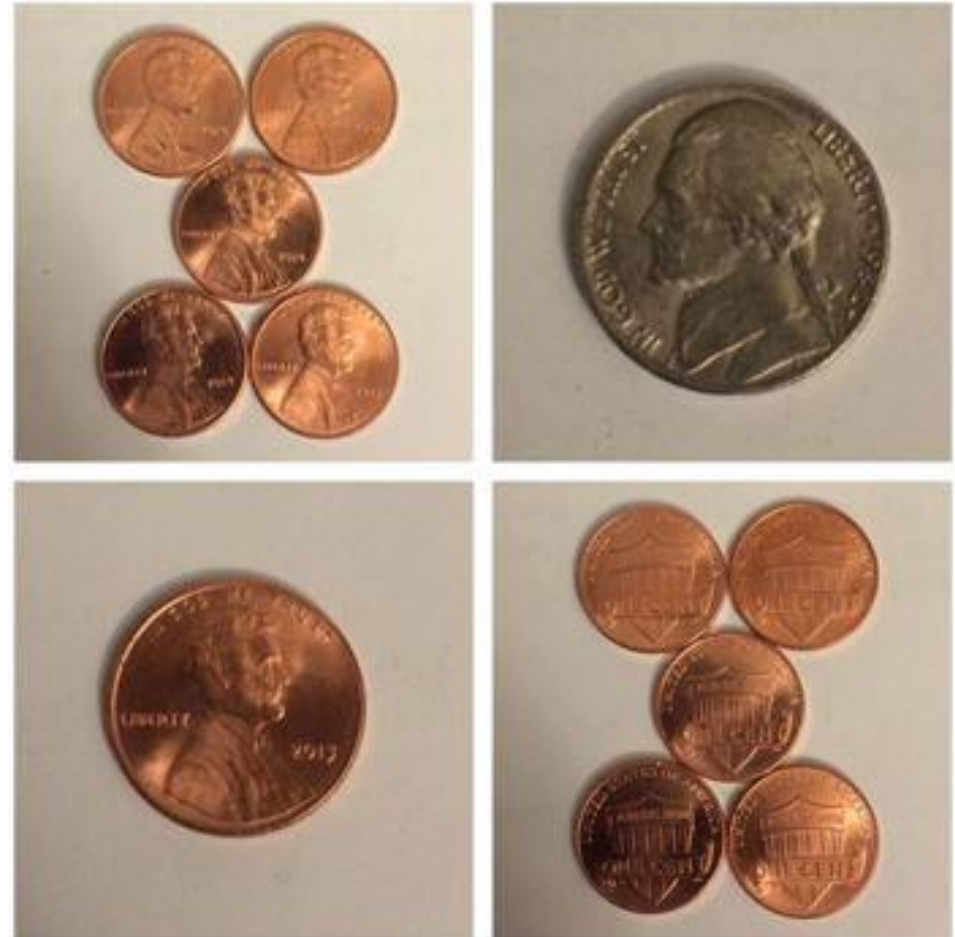
<http://sites.stenhouse.com/wodb/>

Which One Doesn't Belong?



from Andrew Gael

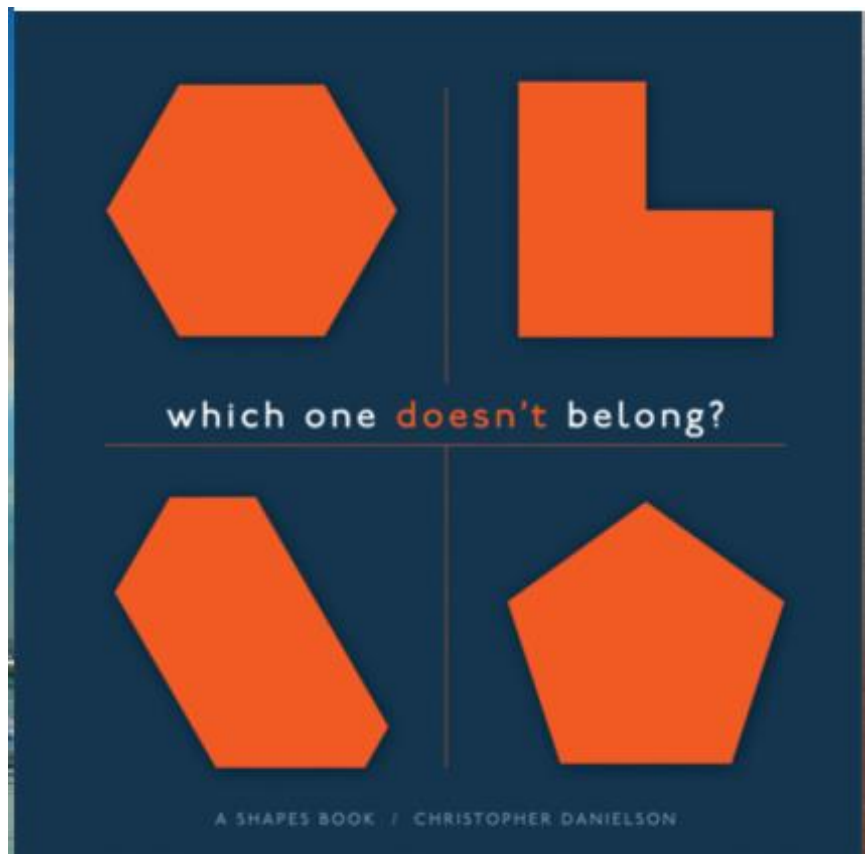
<http://wodb.ca/>



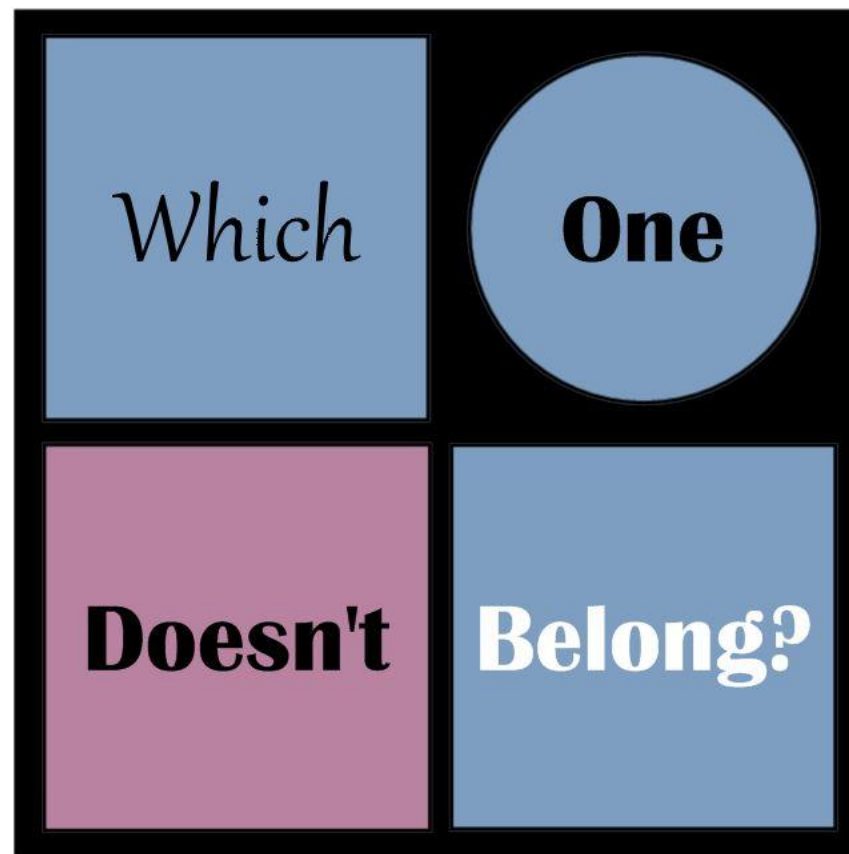
from Andrew Gael

<http://wodb.ca/>

Which One Doesn't Belong?



<http://sites.stenhouse.com/wodb/>



<http://wodb.ca/>



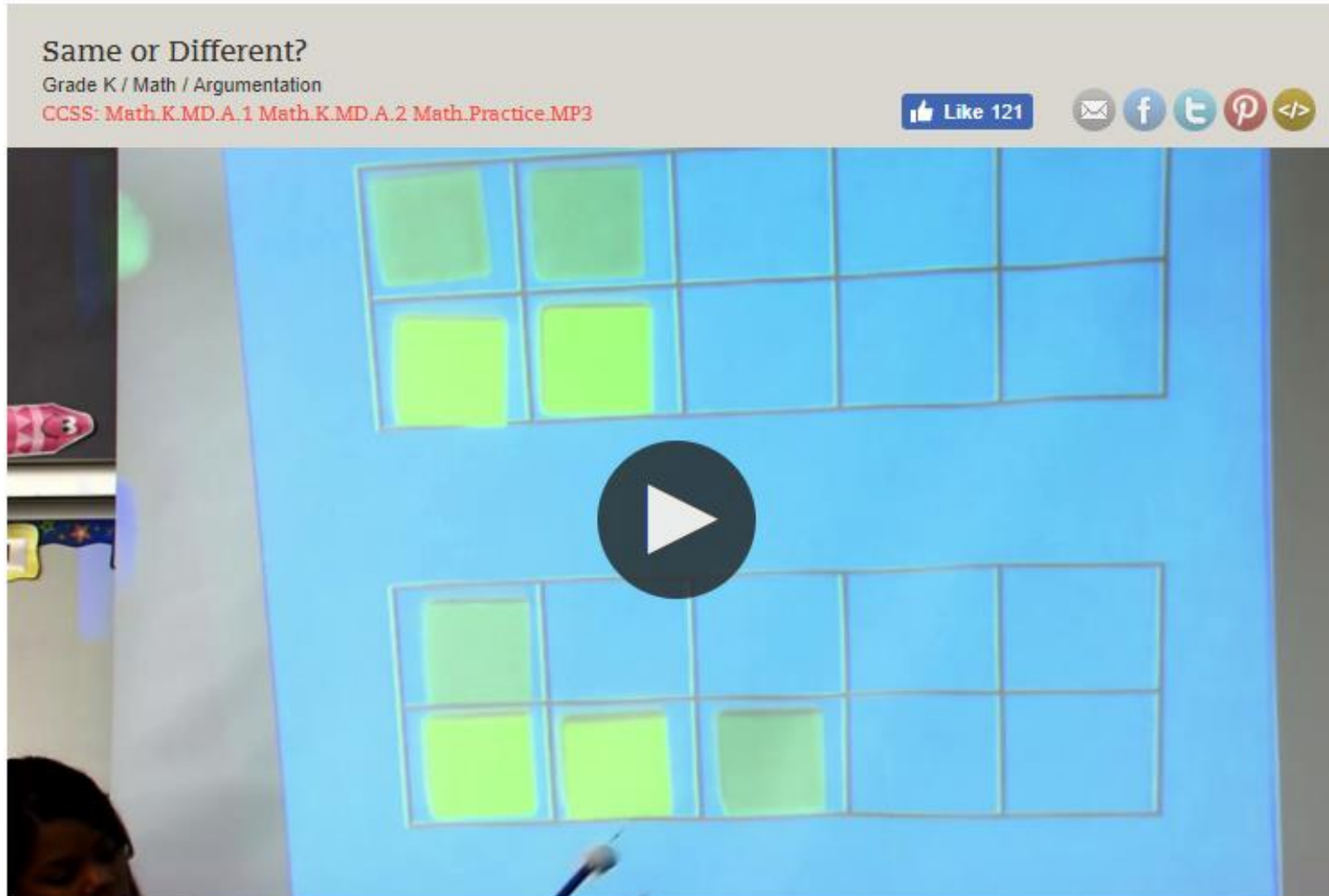
WODB

- *Which one doesn't belong? Why?*
- *Can you think of another reason?*
- *Can you think of a reason for each of the objects in your set?*

REFLECTION

- *Which attributes did you pay attention to?*
- *Was your conversation math-y? Not math-y? Why? Does that matter?*

Same or different?



A 4x6 grid of colored squares (red, yellow, blue) is shown. The text "SAME OR DIFFERENT?" is overlaid in large, bold, white letters with a slight shadow. The word "SAME" is in white, "OR" is in white, "DIFFERENT" is in white, and the question mark is in white. The background is a dark, textured surface.

SAME OR DIFFERENT?

supporting mathematical argument in the elementary grades

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ABOUT



WELCOME!

<https://samedifferentimages.wordpress.com/>

If you are new to the Same or Different? routine, please click the About page in the menu above to learn more. If you're ready to dive in



Photo by [Dennis Klein](#) on [Unsplash](#)



Which One Doesn't Belong?

- Open-ended
- Open-middle
- Inclusion and Exclusion

Same or Different?

- Open-ended(ish)
- Open-middle
- Inclusion or Exclusion



A Collaboration between Early Learning and STEM Initiatives

Fort Vancouver Community Library



Family Engagement Prompts



Find SIZES

How to Play:

"I see a **small** button! I see a **tall** bookshelf! What can you find?"

As you explore the library look for something big, small, short, and tall.

Write or draw what you see.



MATH
at your LIBRARY

SMALL

BIG

SHORT

TALL

Keep going! What other sizes can you find?

In partnership with:

 **THE LIBRARY**
Fort Vancouver Regional Library District

Share what you find!

@mathanywhere



How many?

What can you count?

How many are there?

How did you count them?

Keep going! What else can you count?



MATH
Anywhere

WASHINGTON



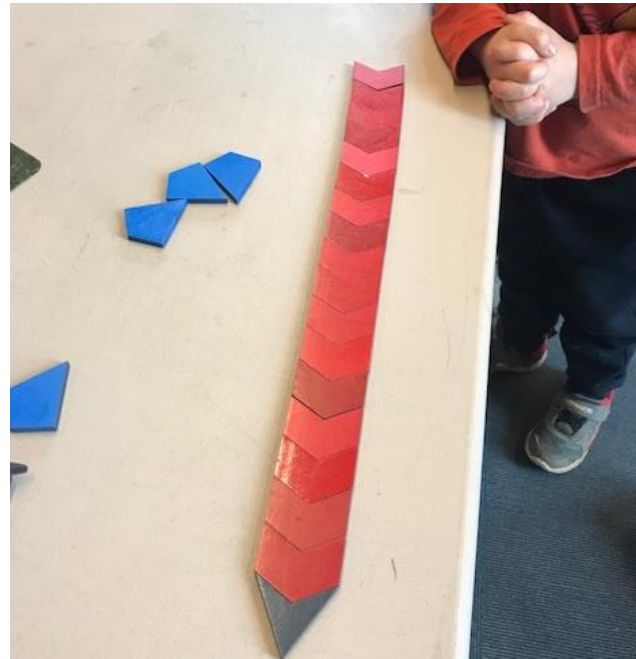
Brought to you by:



Play this game anywhere!

Share your ideas! @mathanywhere





Community Engagement Strategy

- Pop-up Play Materials
- The Book Peddler
- Dot Donuts
- Burgerville
- Chuck's Produce
- Kiggins Theater





MathAnywhere!

@mathanywhere



How many? Food styling. Bringing math to the movies.



3:21 PM - 13 Mar 2018



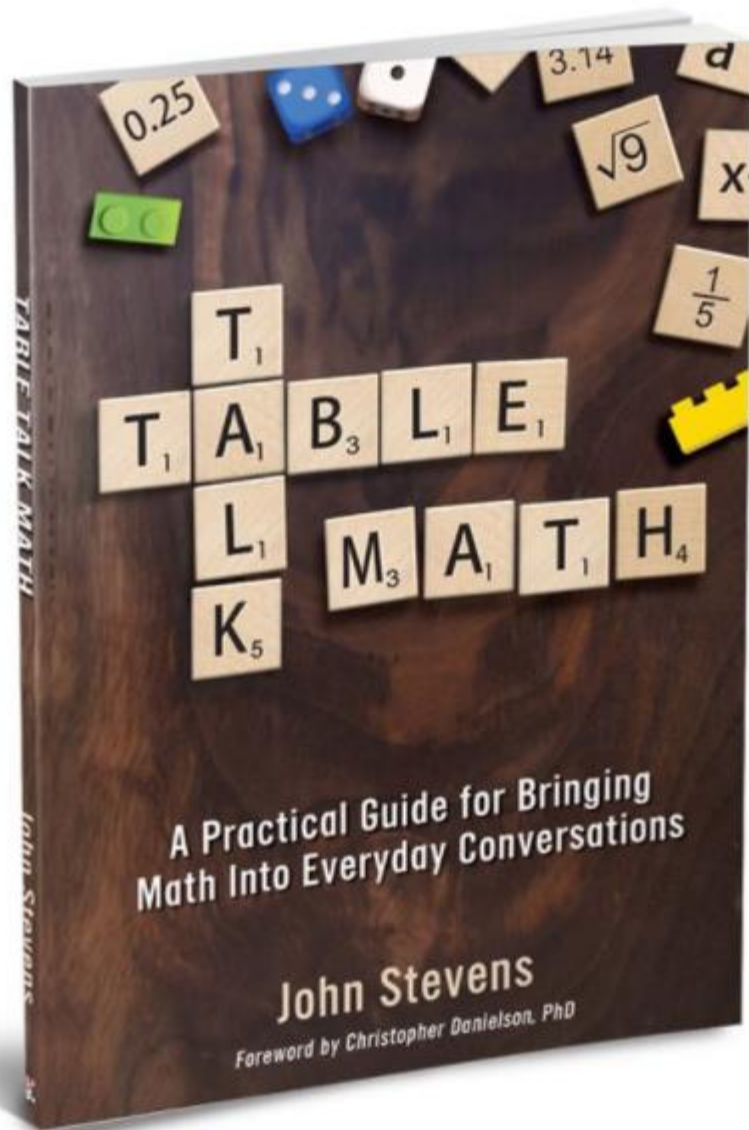
MATH
at the MOVIES



<https://talkingmathwithkids.com/>

@trianglemancsd

#tmwyk



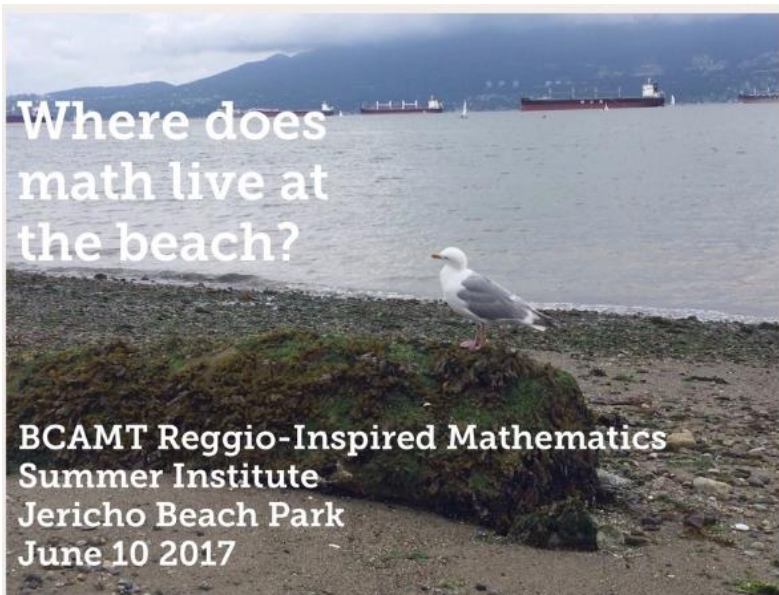
www.tabletalkmath.com

@TableTalkMath



Reggio-Inspired Mathematics

A PROFESSIONAL COLLABORATIVE INQUIRY EXAMINING HOW REGGIO-INSPIRED PRINCIPLES AND PRACTICES MAY ENHANCE THE TEACHING AND LEARNING OF MATHEMATICS



Where does
math live at
the beach?

BCAMT Reggio-Inspired Mathematics
Summer Institute
Jericho Beach Park
June 10 2017

http://janicenovkam.typepad.com/reggioinspired_mathematic/

@jnovakowski38

The banner features a dark blue background with yellow stars. On the left, there are two book covers: one titled 'HOW MANY GUINEA PIGS CAN FIT ON A PLANE?' and another titled 'THE TALENTED MATHS GIRL'. Below the books is a circular logo with a yellow crescent moon and the text 'Bedtime Math'. In the center, there is a yellow banner with the text 'Crazy 8s club' and three smaller banners below it: 'Read it' (purple), 'Live it' (orange), and 'Love it' (blue). Below these banners is the text 'Love math like dessert!'. On the right, there is a birthday cake with pink frosting and candles, with math numbers (1, 6, 6 1/2, 5 1/2) on the candles. Below the banner, there is a Twitter profile section with the following statistics: Tweets 13.6K, Following 1,299, Followers 5,894, and Likes 2,105. There is a 'Following' button and a small icon of a person.

Read it

Live it

Love it

Love math like dessert!

Tweets 13.6K Following 1,299 Followers 5,894 Likes 2,105

Following

<http://bedtimemath.org/>

@BedtimeMath

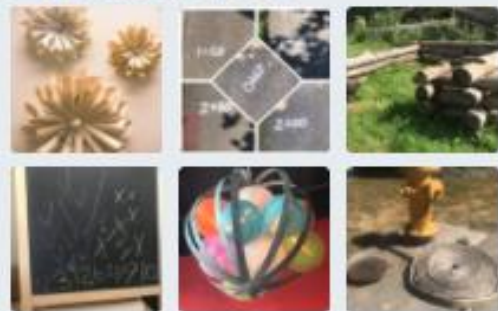


MathAnywhere!

@mathanywhere

Joined January 2017

6 Photos and videos



Tweets 14 Followers 72 Likes 11 Lists 0 Moments 0

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MathAnywhere! @mathanywhere · Sep 28

How many? #mathanywhere



Your Tweet activity

Your Tweets earned **1,168 impressions** over the last 28 days

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DRS Debt Counseling @8...

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and is tonal colors**



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Test

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MathAnywhere! @mathanywhere 2 weeks ago



NOTICE

ENGAGE

PROMPT

HAVE FUN!

WHAT BOOKS ARE
TO READING
PLAY
IS TO MATHEMATICS.

-DANIEL FINKEL
@MATHFOROVE



Christopher

@Trianglemancsd

Following



Hey everyone! [@mdaley15](#) is just getting started with a really delightful project. Follow [@mathanywhere](#) to encourage it! [#tmwyk](#)

2:52 PM - 3 Aug 2017

