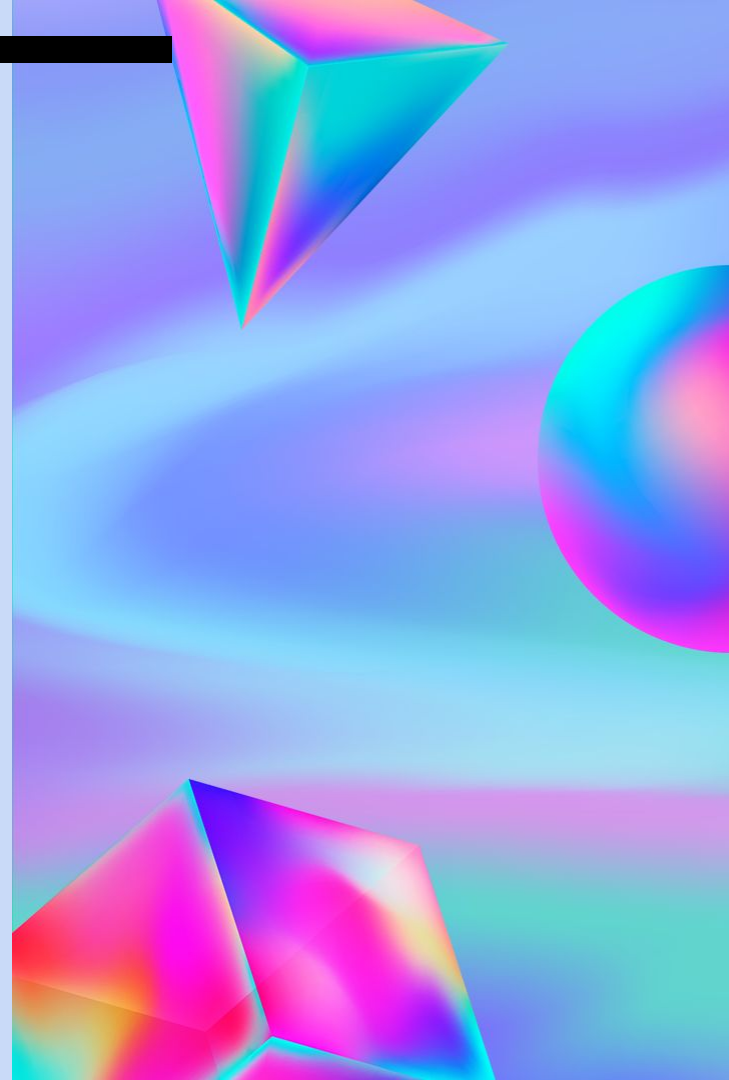
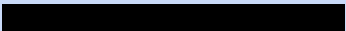


The 1st week of Math: Planning for Math K-3 Companion Slides

Alberta Professional Learning Consortium
Summer Institute



INTRODUCTIONS



Wanda Dechant
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Trail runner & human to
25 animals



Jackie Ratkovic
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Volleyball and Slo-pitch player
and mom of 2 great kids













Alberta Professional Learning Consortium



WHO IS HERE?

Kinder	Grade 1	Grade 2	Grade 3	Other
Lorel Monique Anita Melissa Serena	Stefania Riadh Michelle Mason Joleen Binder Jessica Heath Kristine Denise Lemieux Carmen	Felicity Haldeman Chelise Christine Svensson Jody Beatrice Anna Michelle Tracey Daphne Sonia S	Sylvia Loretta Mykytyshyn Michelle Jody Brittney	Rizwana Jenny Yuen (Online K-6 + HS) Arielle

WHO IS HERE? - SLIDE 2

Kinder	Grade 1	Grade 2	Grade 3	Other
	  	   	  	

IDEAS TO SHARE WITH COLLEAGUES

Kinder	Grade 1	Grade 2	Grade 3	Any Grade
<p>Dice game- in partners each partner will roll a die and if they have a sense of numbers already they can count to see who has more-- but you can also model/show how they can just look at the dots in a more/less fashion without necessarily that one to one correspondence or number sense-- this can progress through the year to using number sense, to addition, and even subtraction</p>		<p>The Ellen game, with food or with paper held up to your head</p>	<p>Student gives a biography about themselves using math facts. Ex: I am 4x6 years old</p> <p>Example: Me, by the Numbers</p> <p>Template link</p>	<p>I have a Google Slide Deck for each subject for the entire year that I add to all the time. Saves work year over year.</p>
	<p>Day 1 Math lesson: - As a class discuss: what is math? Write some answers on the board. - Read aloud "What is Math?" by Rebecca Kai Dotlich - Class brainstorm: how has our definition of math changed after reading</p>			<p>https://www.peteriljedahl.com/teachers/numeracy-tasks</p>



5 Key Areas of Focus for Starting your Math Year

Building Trust & Beliefs

Inspiring Curiosity

Promoting Collaboration

Establishing Expectations

Math Activities

K -3 Getting to Know Your Students

Building Trust and Beliefs

Relationships between teacher and students, and between students and students (Ex: [milliseconds](#) when self regulated).

Inspiring Curiosity

What dispositions are important in learning? How might you continue to build these dispositions over the year? What do students share that tell you about their learning?

[Mistakes are important](#) (Youcubed.org)

Establishing Expectations

What do these students believe it means [to be good at math](#)?

Do students [see themselves as mathematicians](#)?

Math Activities

Reflection: Based on your student observations, how might you adjust your planning and instruction? When and how might you [include rich tasks](#) and [math routines](#)?

Collaboration

What does it mean to students when we talk about collaborating?

Group Work: [What we like and don't like](#)

Resources: Getting to Know Students

Drawing

Draw something you love.

Share with the class. Where is the math in the drawings?

Beliefs about Math

Ask students what they believe it means to be good at math?

Reinforce that math is about noticing patterns, building towers, comparing shapes.

What math do students see in the room?

K,1

Survey

My favourite food is.....

Have students move to one of the four corners of the room based on the answer suggestions you provide. Ask which food has the most votes? How do you know? Which food has the least votes?

Sharing Circle

Clapping pattern while students share.

I am good at ____

I will work on ____

(for each word there is a cross-body clap)

Resources: Getting to Know Students 2-6

Sharing Survey

[Continued Support](#) - Ideas for continuing to check in throughout the year.

Relationship Menu

Many options that are simple to more detailed like a menu.

[ARPDC Support](#)

Learning Experience Samples (Rich Tasks)



Kindergarten

Movement Counts.
From Head to Toe
FOCUS of the
lesson: one-to-one
correspondence.

Read aloud



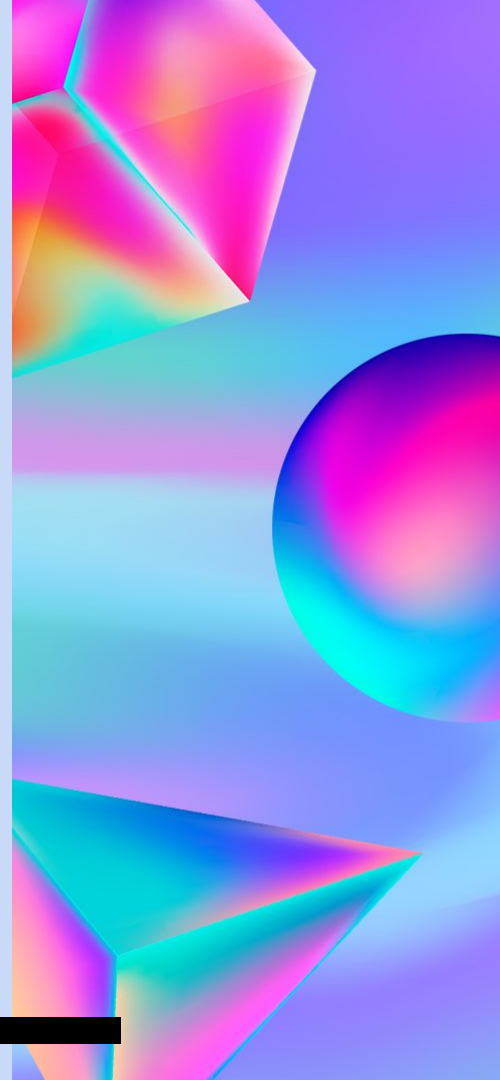
Grades 1,2

Numbers within
numbers. FOCUS of
the lesson: There are
many different ways
to see and
understand math. We
can learn by listening
to other perspectives.



Grades 3-6

Four Fours - FOCUS of
the lesson: Having a
growth mindset for
mathematics is
important. We can all
learn math. Self belief is
really important.





Visual Number Patterns


Study the number visual patterns, at first on your own.

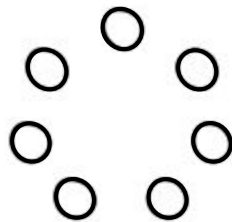
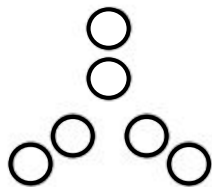
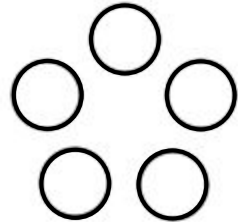
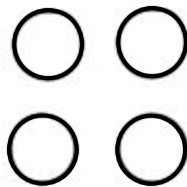
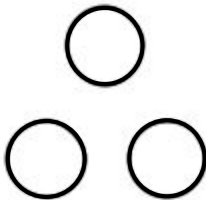
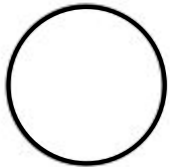
What do you notice? What patterns do you see?




After 3 minutes, share what you notice with your group.

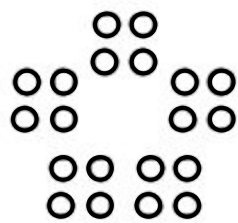
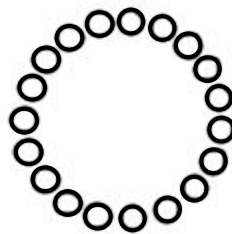
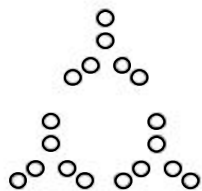
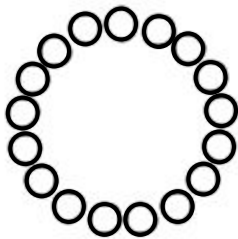
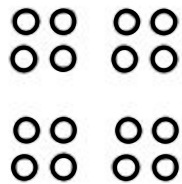
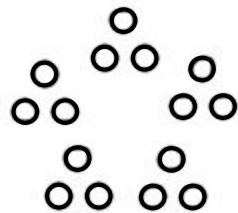
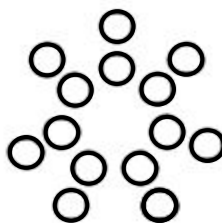
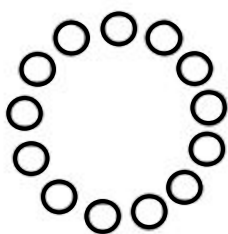
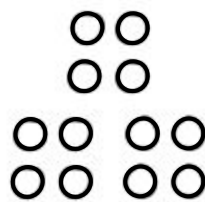
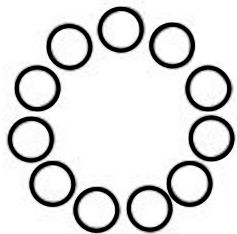
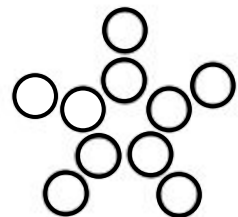
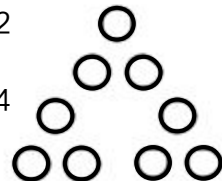
Gr. 1-2: Explore the number visuals and record the different ways you see each chosen number visual made up of other numbers.

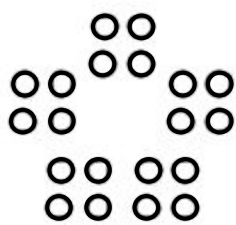
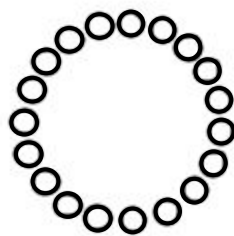
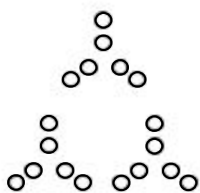
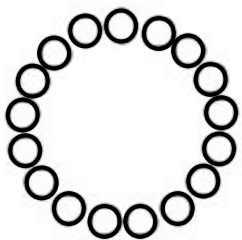
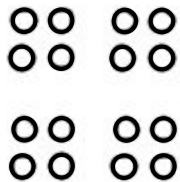
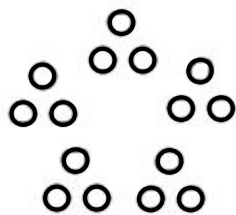
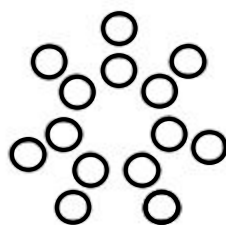
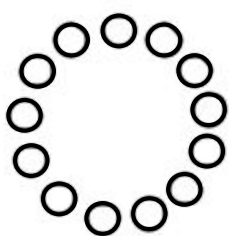
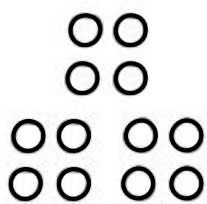
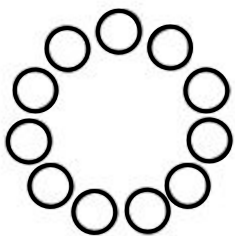
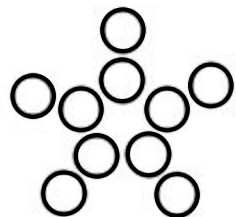
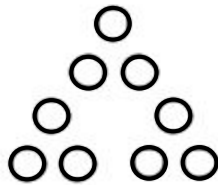
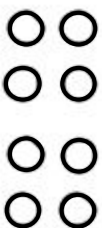
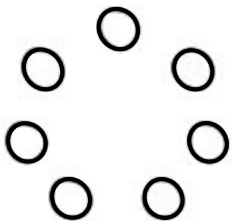
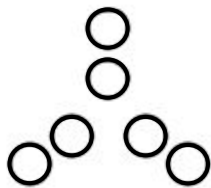
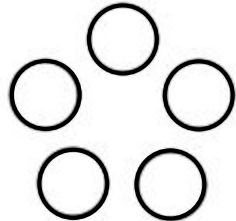
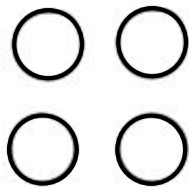
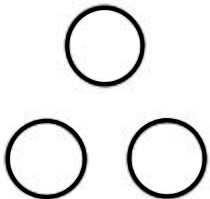
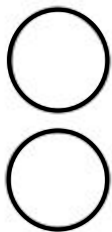
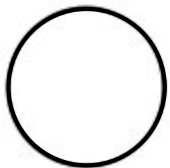
Gr 3+: Explore all the multiples of 3, 4, 5, etc. What does each set of multiples have in common? Are there any differences?






 4 groups of 2
 2 groups of 4
 (2 ways)
 2 groups of 2,
 twice







$$2+2+2+2 = 8$$

$$4+4 = 8$$

 4 groups of 2

 2 groups of 4
(2 ways)

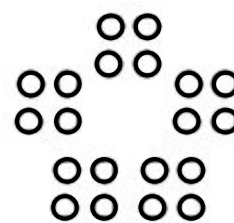
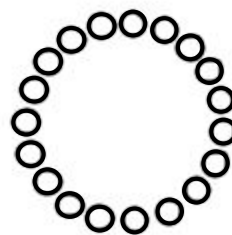
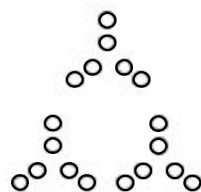
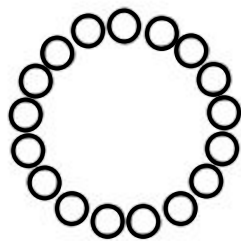
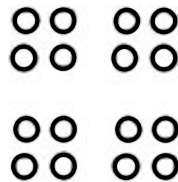
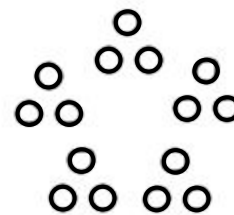
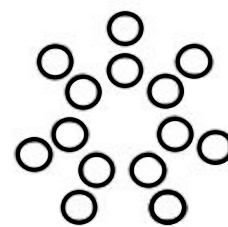
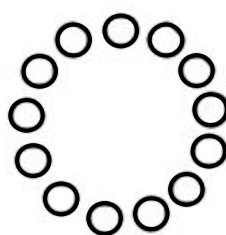
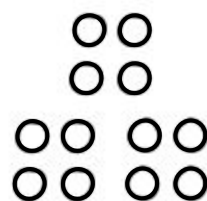
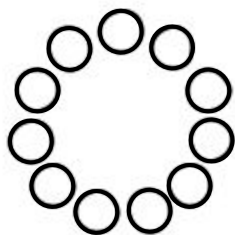
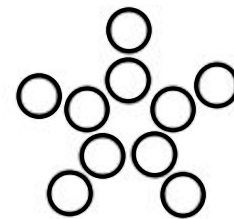
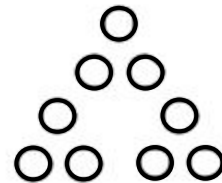
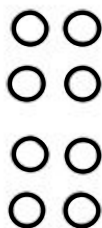
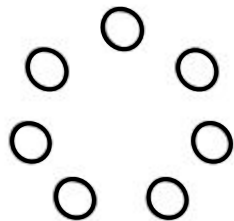
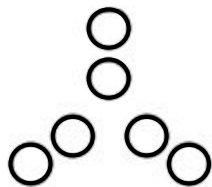
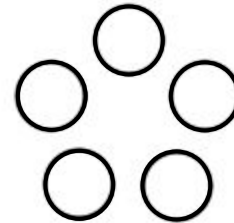
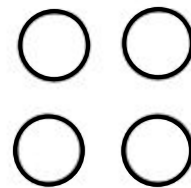
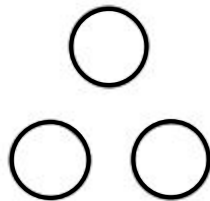
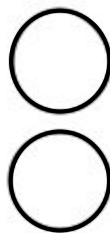
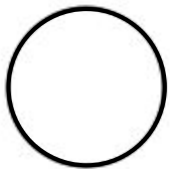
 2 groups of 2,
twice

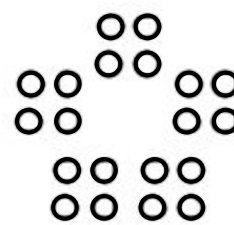
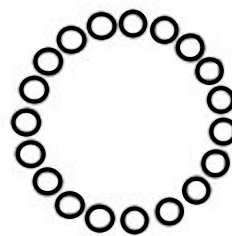
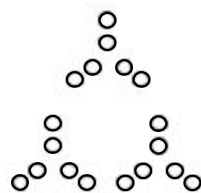
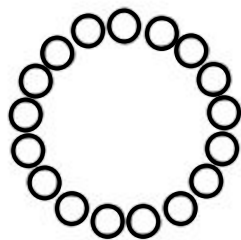
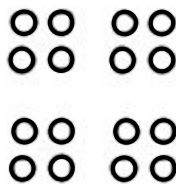
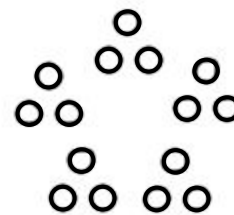
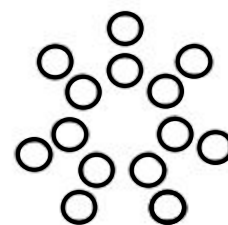
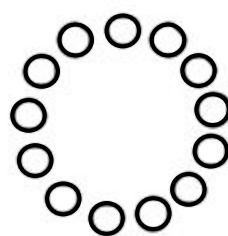
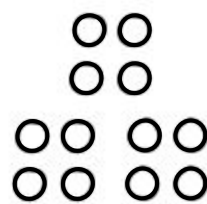
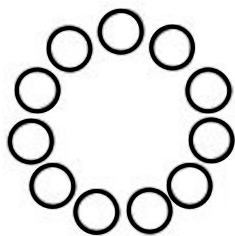
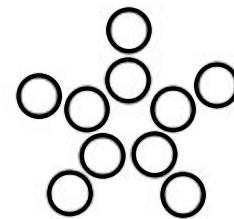
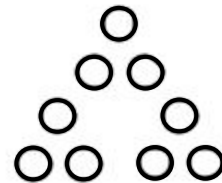
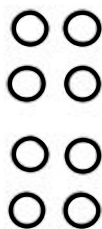
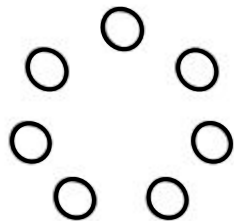
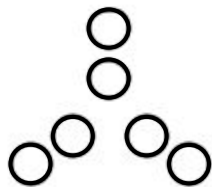
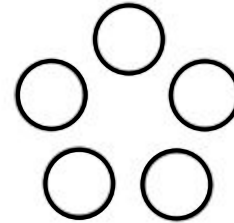
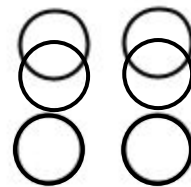
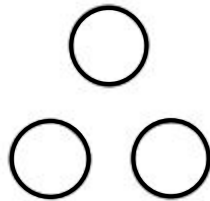
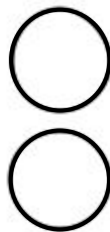
$$4 \times 2 = 8$$

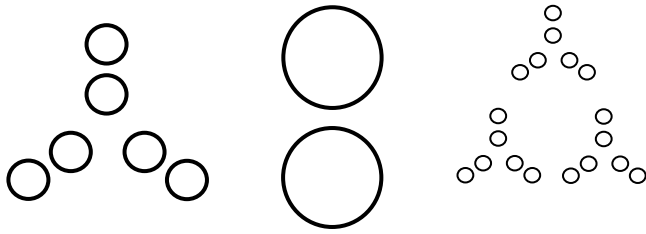
$$2 \times 4 = 8$$

$$2 \times 2 \times 2 = 8$$

$$8 \times 1 = 8$$



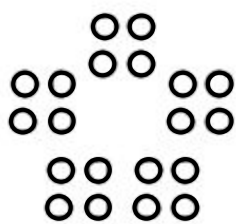
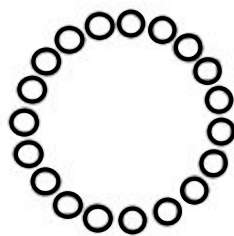
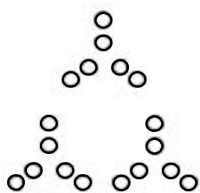
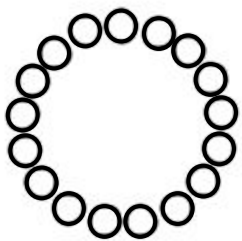
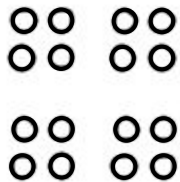
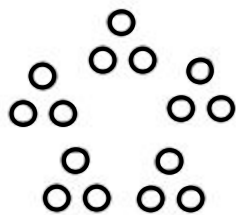
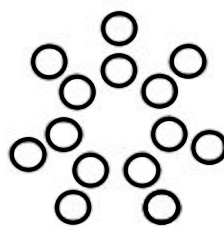
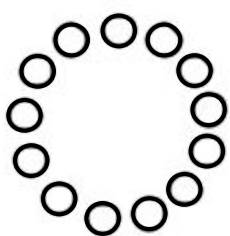
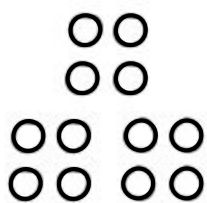
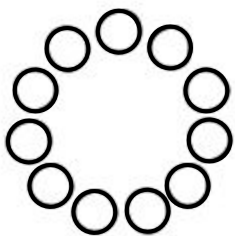
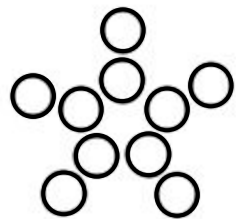
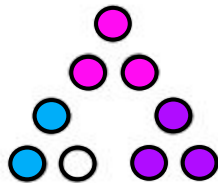
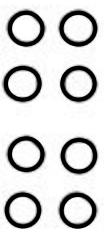
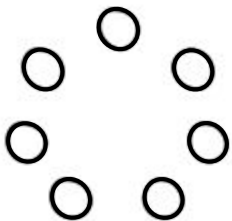
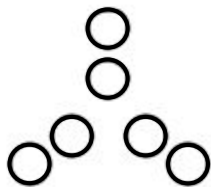
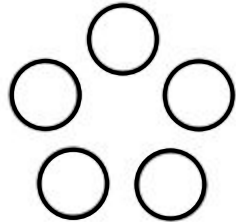
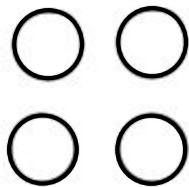
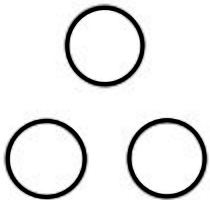
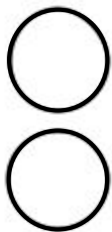
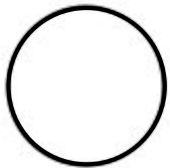


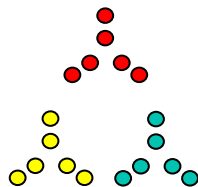
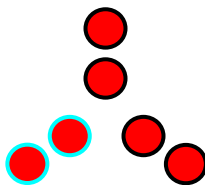
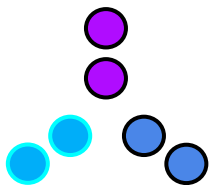
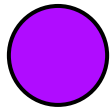
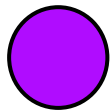


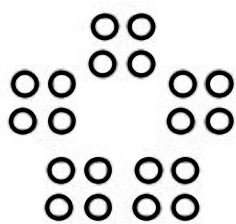
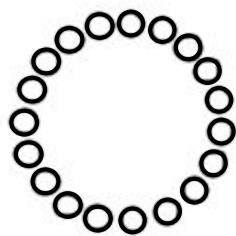
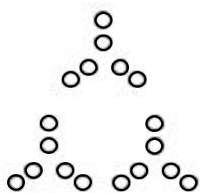
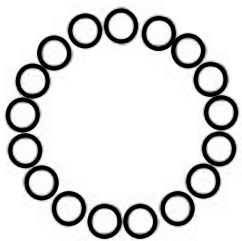
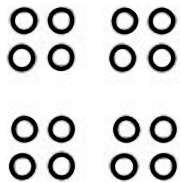
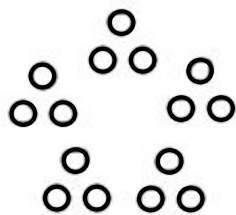
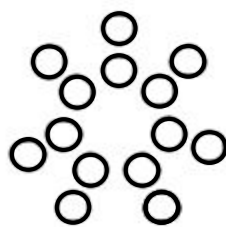
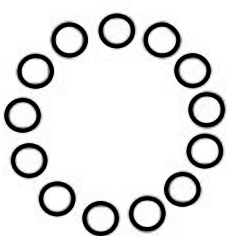
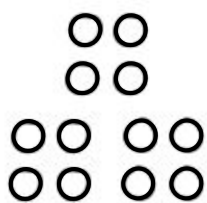
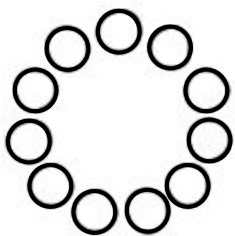
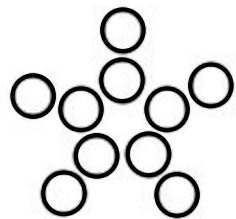
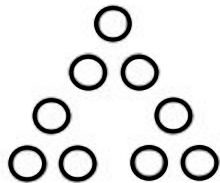
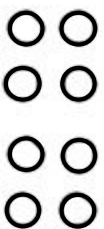
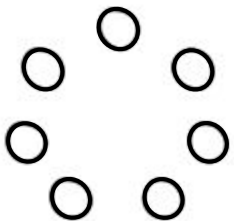
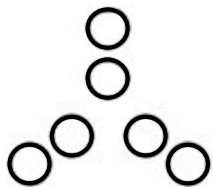
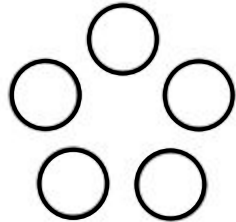
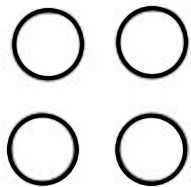
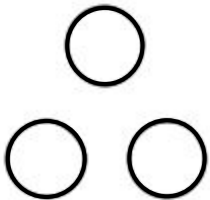
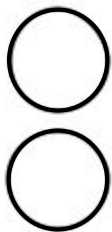
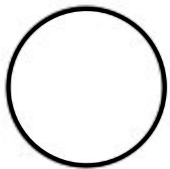
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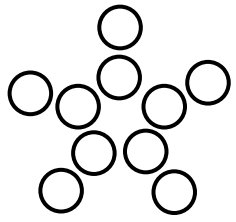
Multiples

Skip counting







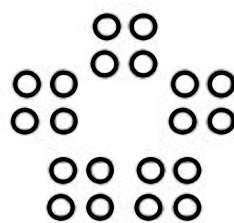
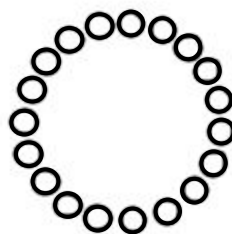
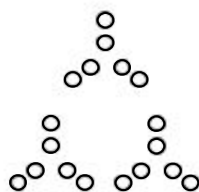
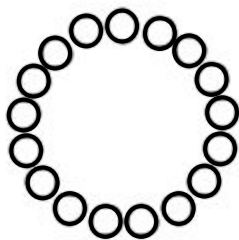
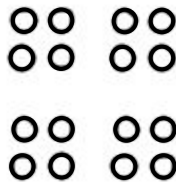
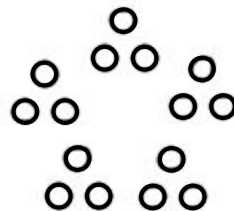
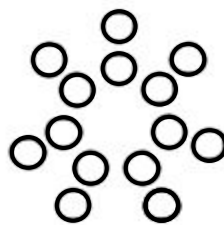
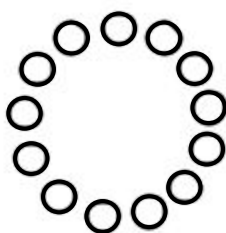
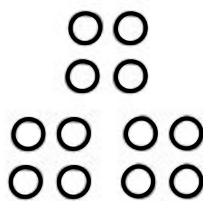
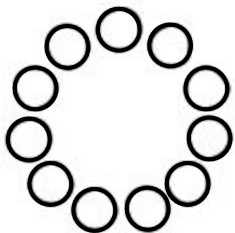
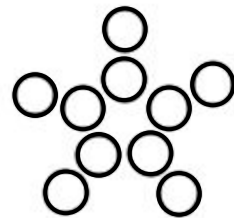
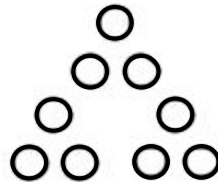
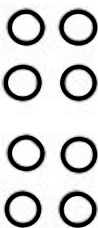
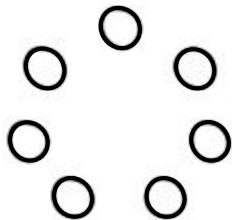
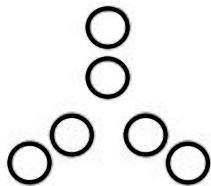
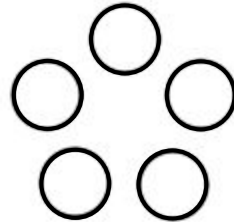
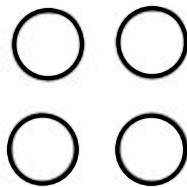
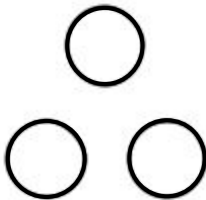
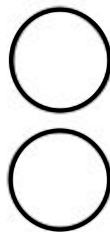
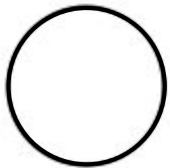


5 groups of 2

$2+2+2+2+2$

1 group of 5 and 5 ones on the outside

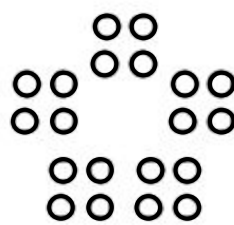
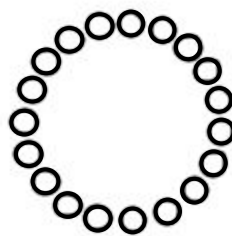
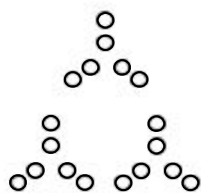
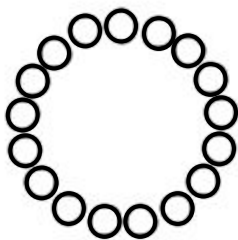
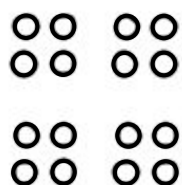
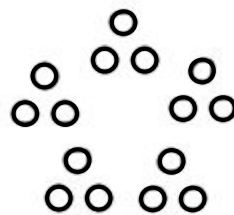
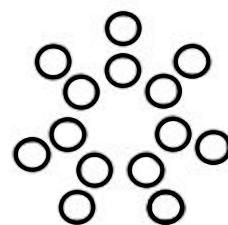
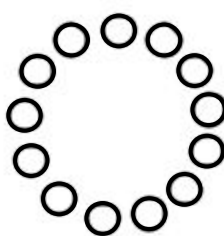
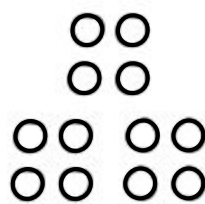
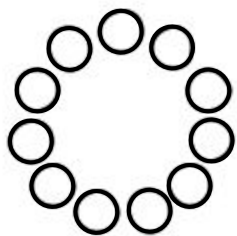
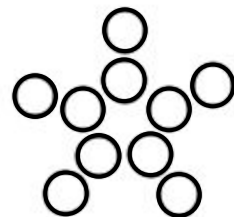
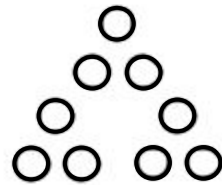
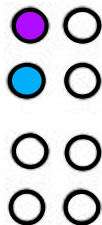
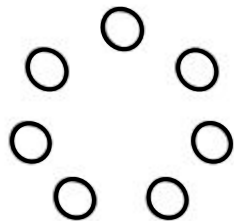
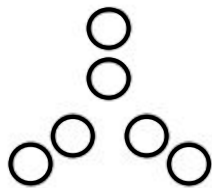
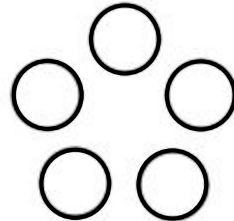
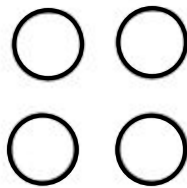
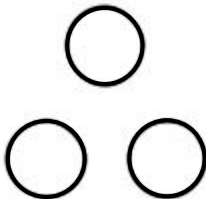
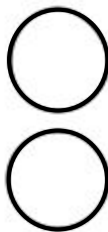
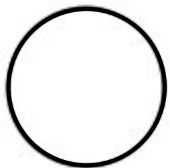
$5+1+1+1+1+1$



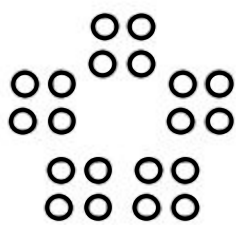
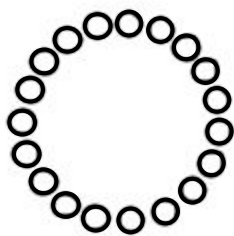
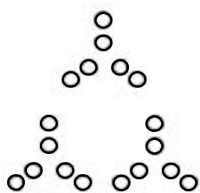
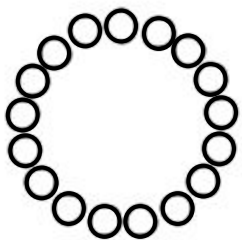
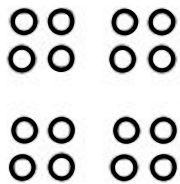
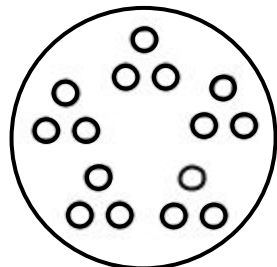
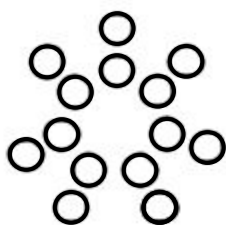
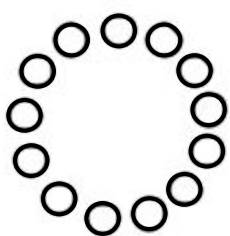
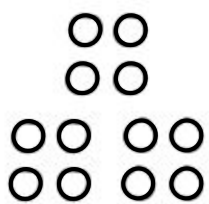
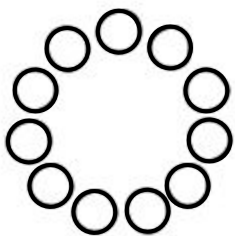
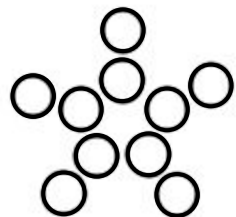
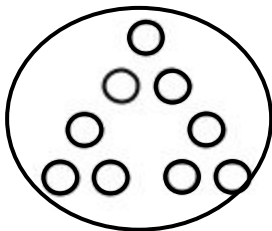
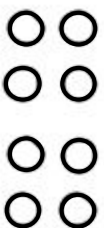
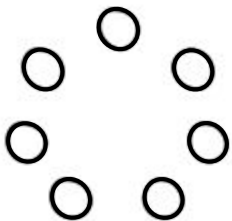
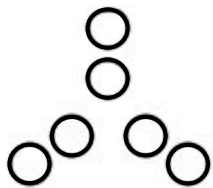
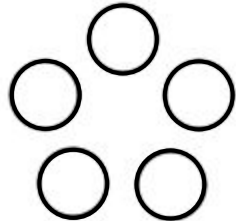
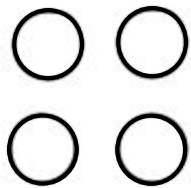
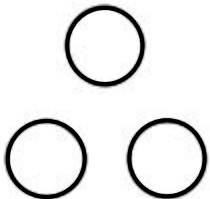
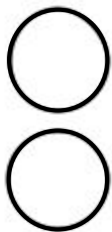
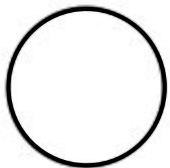
Some arrangements are more easily subitized

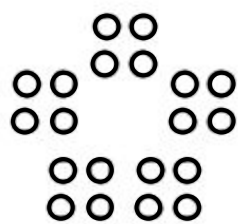
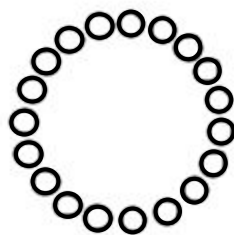
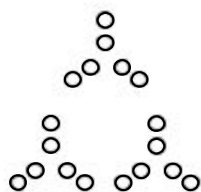
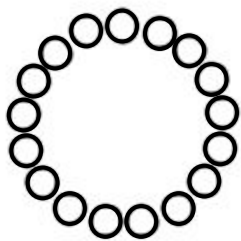
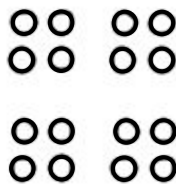
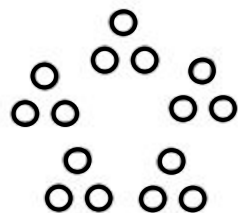
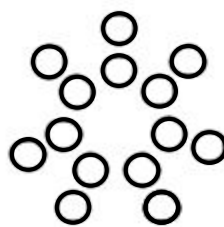
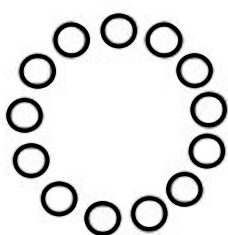
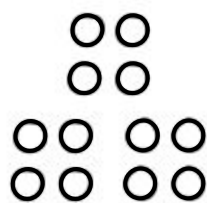
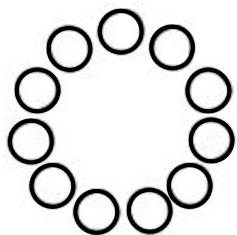
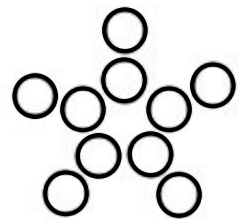
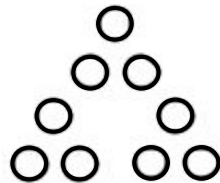
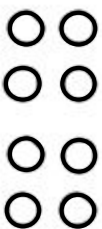
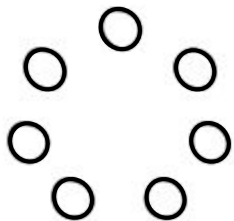
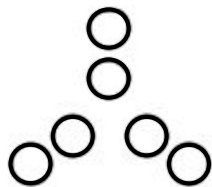
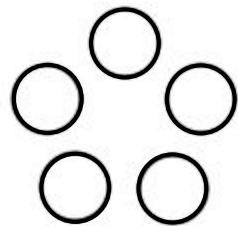
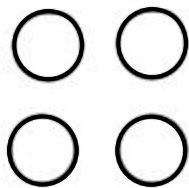
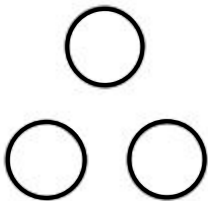
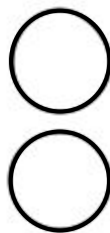
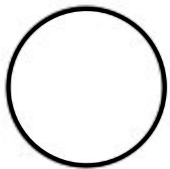
Symmetry

Easier to count when they are grouped vs the circle

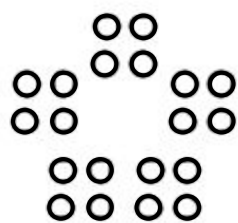
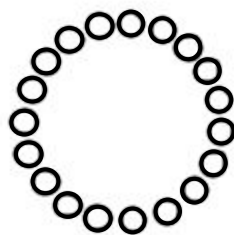
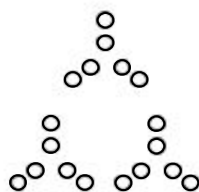
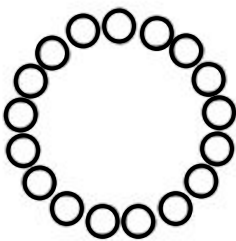
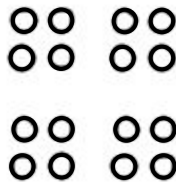
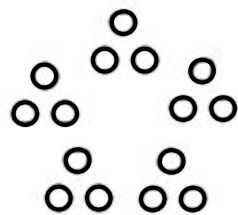
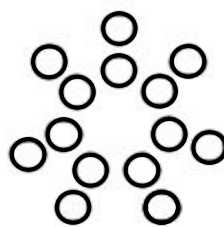
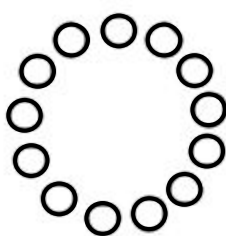
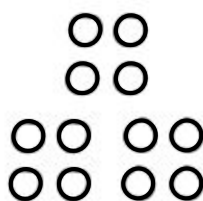
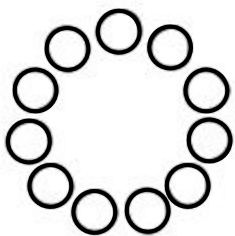
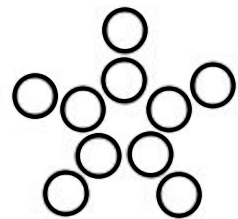
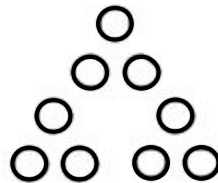
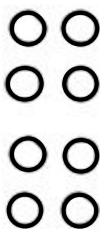
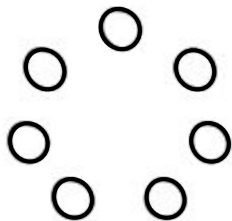
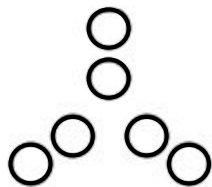
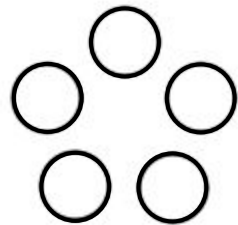
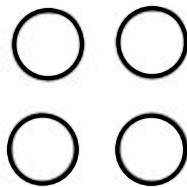
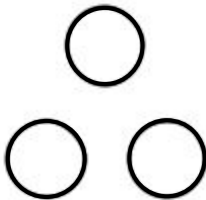
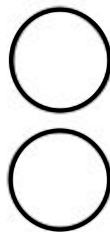
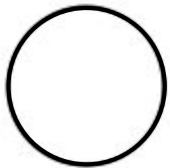


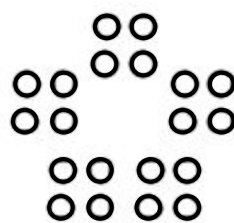
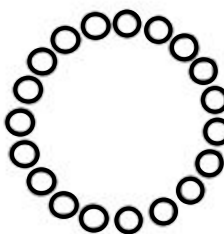
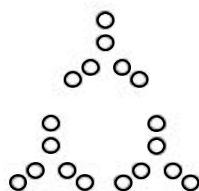
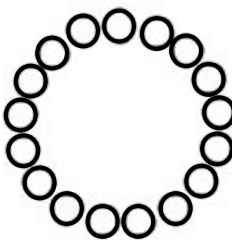
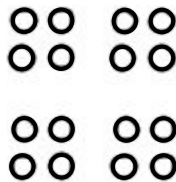
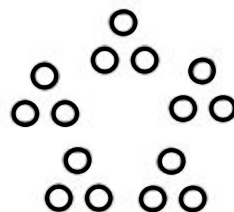
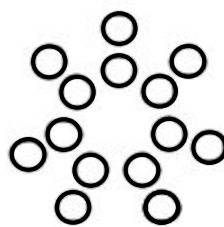
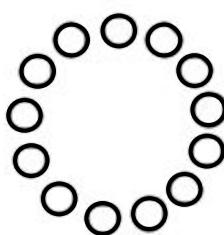
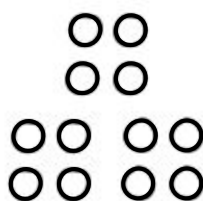
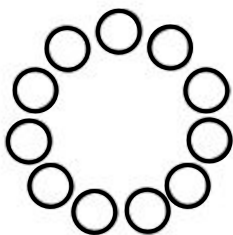
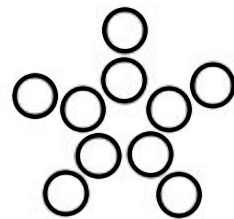
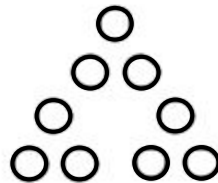
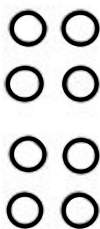
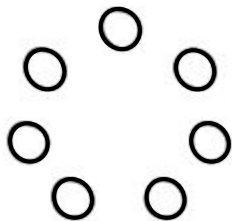
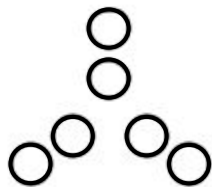
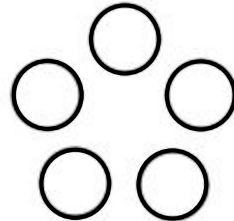
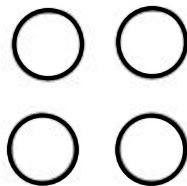
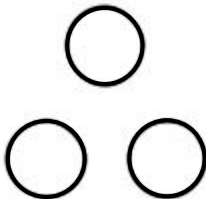
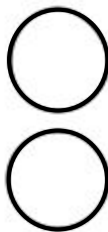
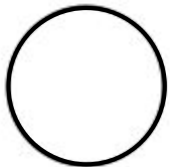
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Two columns of 4
Four groups of 2

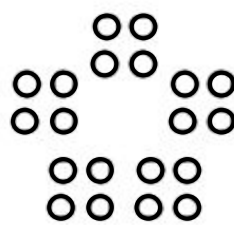
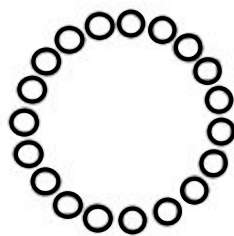
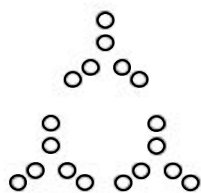
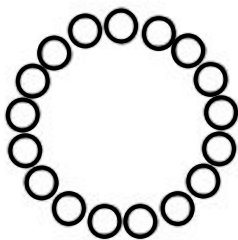
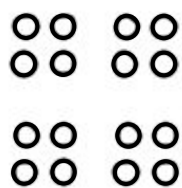
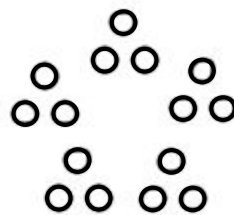
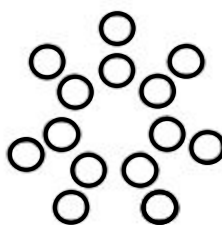
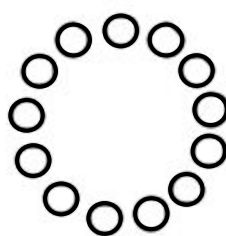
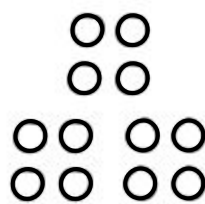
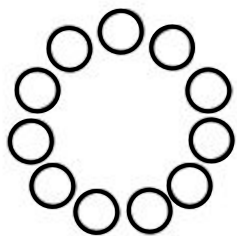
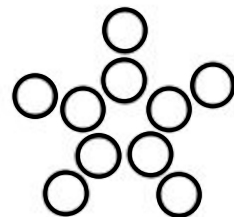
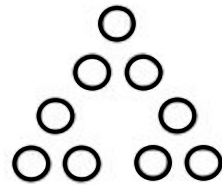
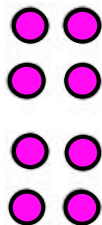
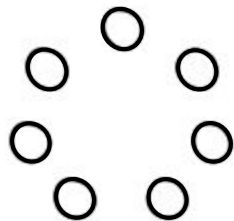
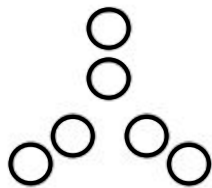
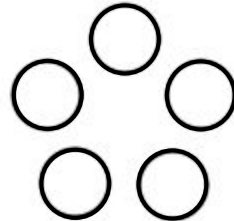
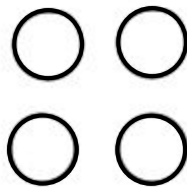
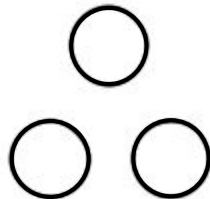
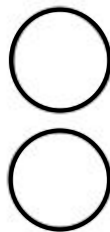
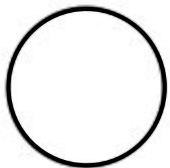


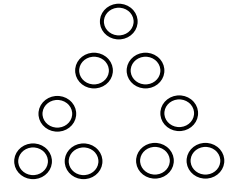
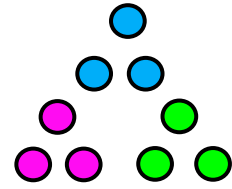


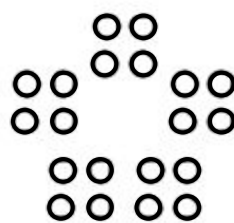
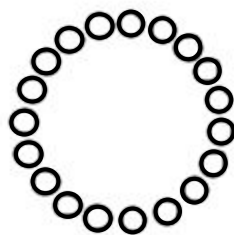
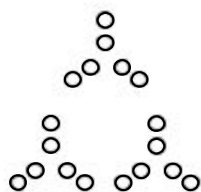
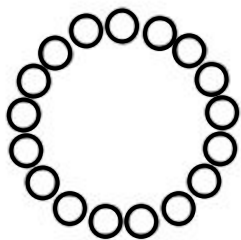
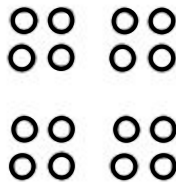
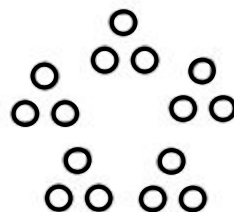
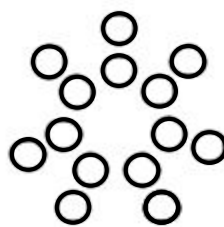
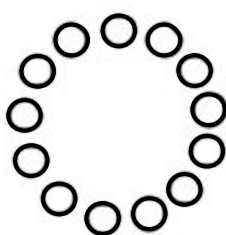
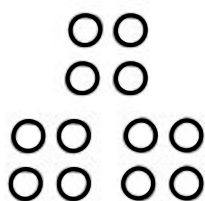
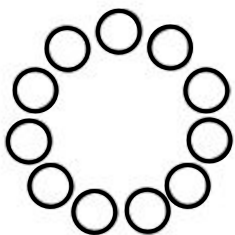
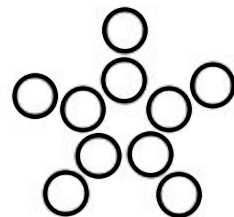
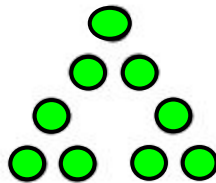
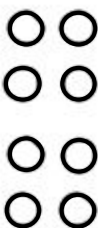
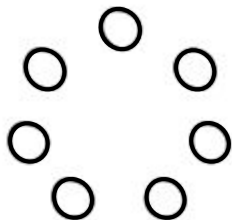
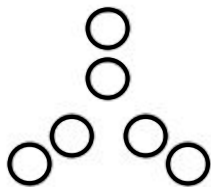
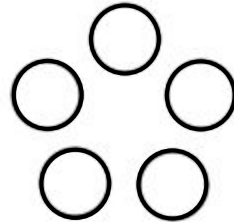
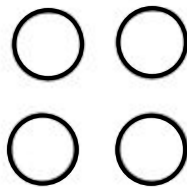
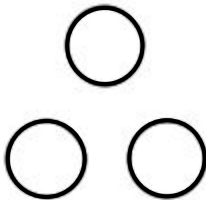
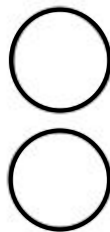
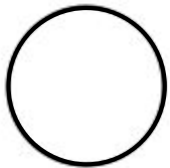
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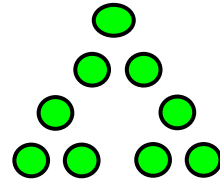
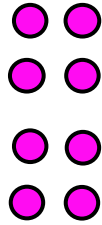


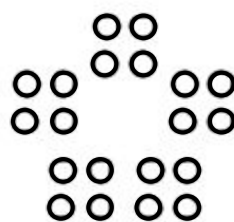
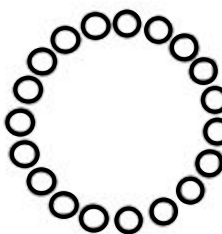
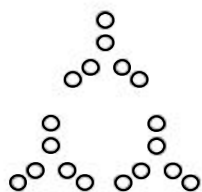
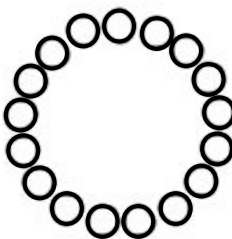
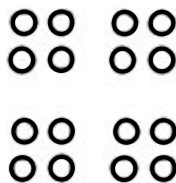
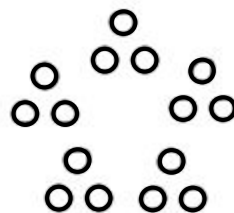
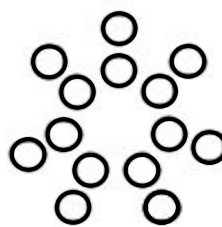
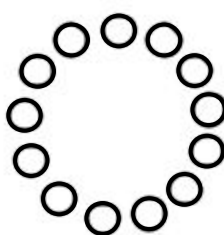
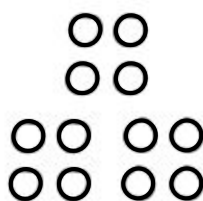
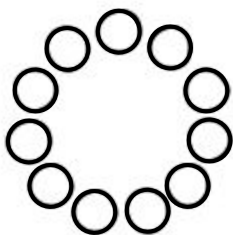
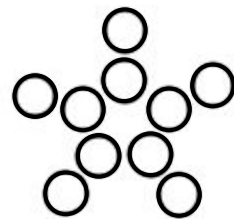
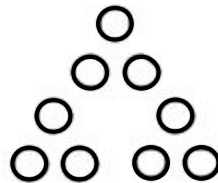
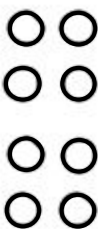
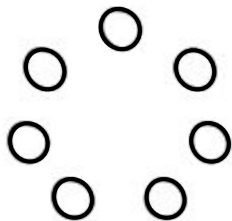
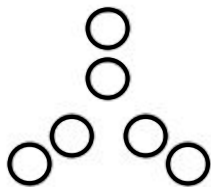
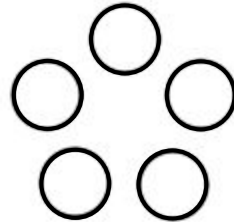
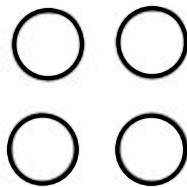
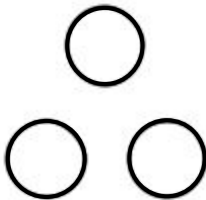
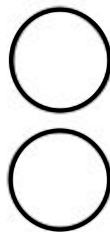
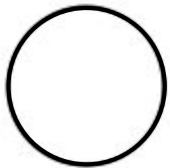


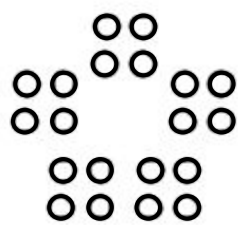
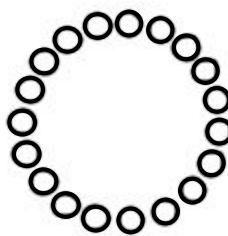
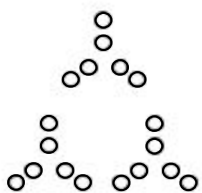
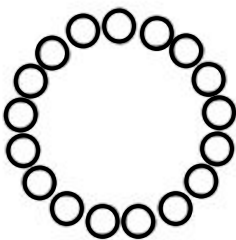
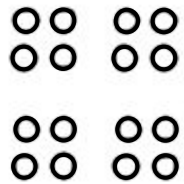
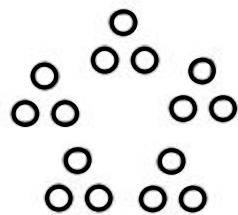
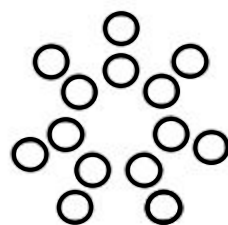
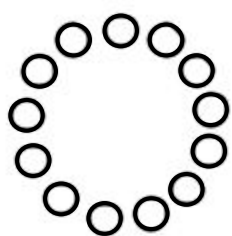
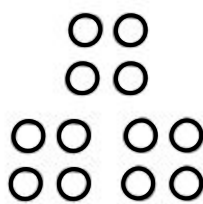
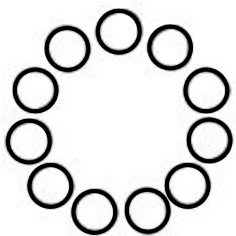
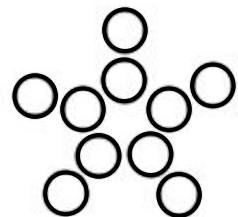
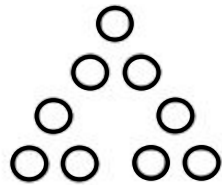
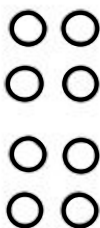
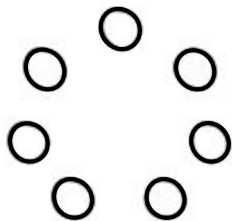
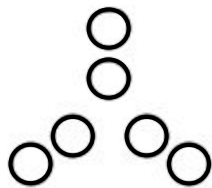
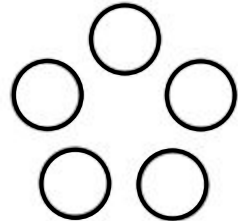
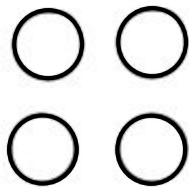
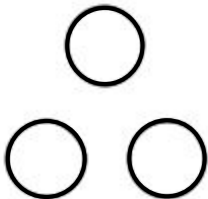
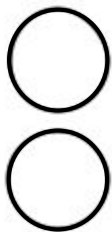
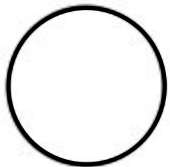


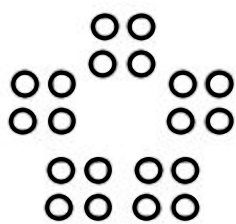
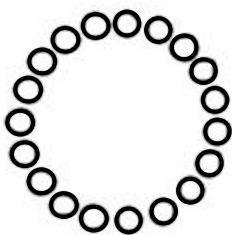
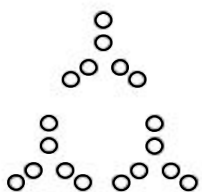
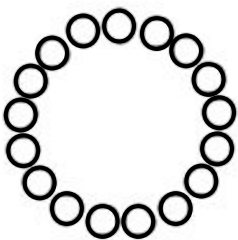
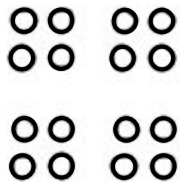
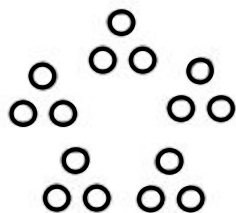
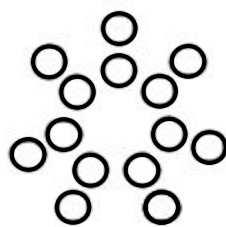
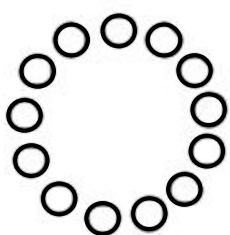
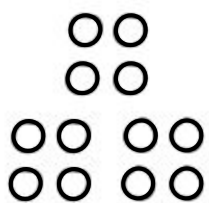
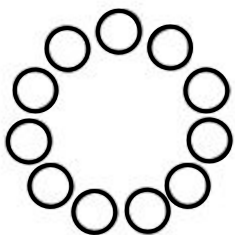
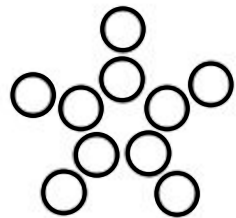
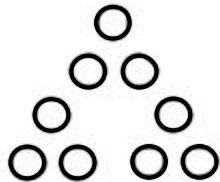
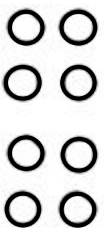
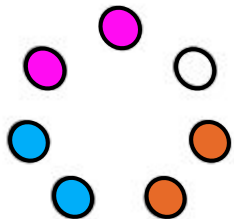
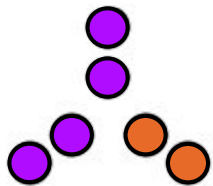
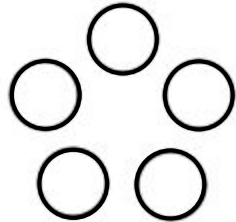
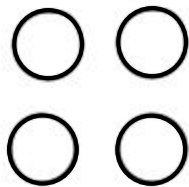
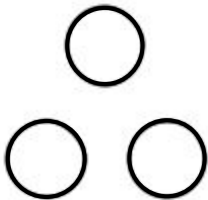
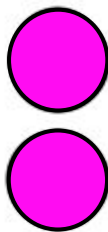
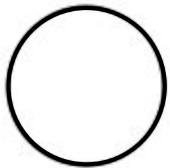












K-3

Reflection: Choose one of the following to answer in the chat.

1. How could this experience help you to get to know your students?
2. How might something like this help with building classroom culture?



Movement Counts

February 1, 2016

This is a [Video](#) - for grade levels [Pre-K](#), [Kindergarten](#)

Tagged [Animals](#), [English Language Learner](#), [Play](#), [Books](#)

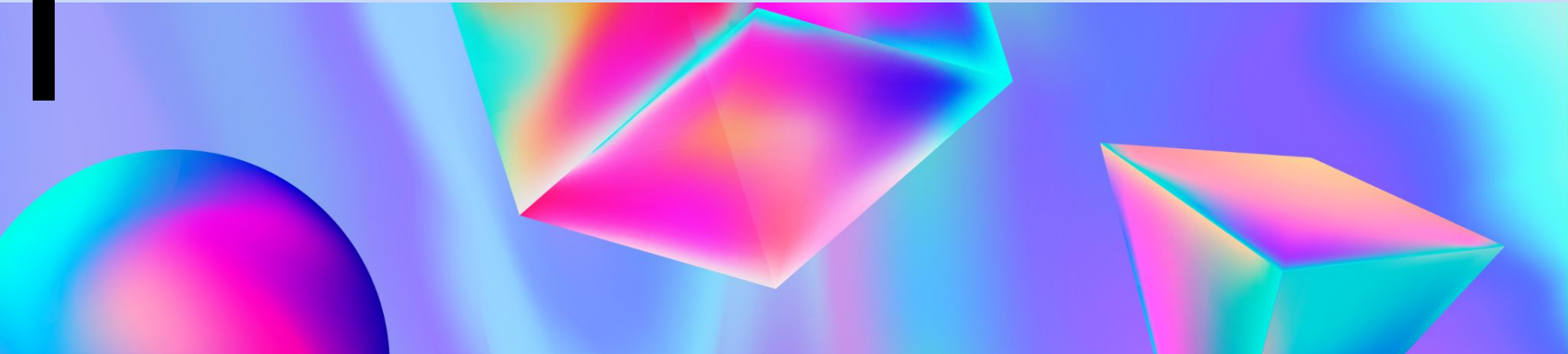
Building Trust & Beliefs
Inspiring Curiosity
Promoting Collaboration
Establishing Expectations
Math Activities



Building Trust & Beliefs
Inspiring Curiosity
Promoting Collaboration
Establishing Expectations
Math Activities

03

Planning



Resources: Math Activities (Rich Tasks)



You Cubed
(K-12)

Week of Inspiring
Math Tasks



3 Act Tasks
(2-12)

Making Math
Moments

3 Act Tasks from
Graham Fletcher

**Erikson Math
Institute** (PreK-2)

The Idea Library



**Supporting
Mathematical**

Thinking Collection of
Math Routines (Gr k-3)

Getting Started: Planning

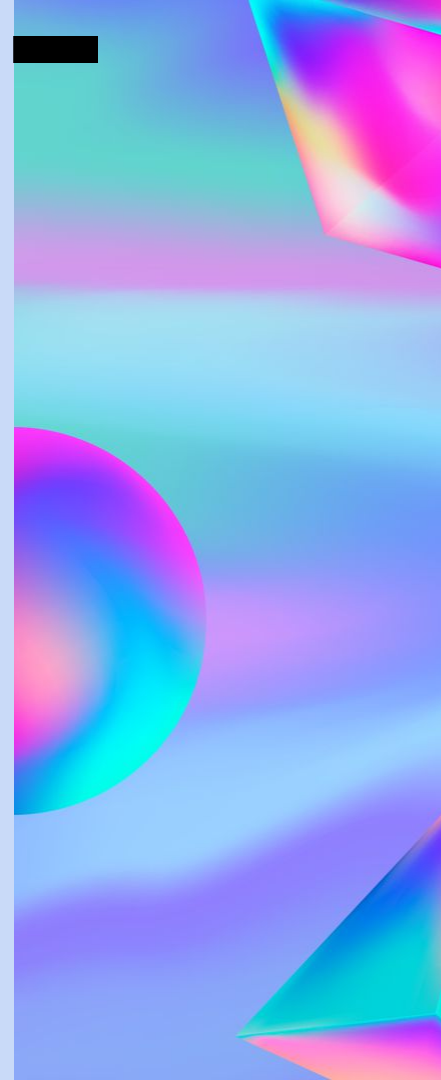
Grade Level: _____ Week of: _____

If you adapt the template, please share it back 😊	Monday	Tuesday	Wednesday	Thursday	Friday
Learning Experience	(If needed) Pre Lesson task: Numbers within numbers - see lesson plan from Youcubed.	(If needed) Pre Lesson task:	(If needed) Pre Lesson task:	(If needed) Pre Lesson task:	(If needed) Pre Lesson task:
Competencies Focus	<input type="checkbox"/> Critical Thinking <input checked="" type="checkbox"/> Problem-Solving <input type="checkbox"/> Research and Managing Information <input type="checkbox"/> Creativity and Innovation <input type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration <input type="checkbox"/> Citizenship <input type="checkbox"/> Personal Growth and Well-being	<input type="checkbox"/> Critical Thinking <input type="checkbox"/> Problem-Solving <input type="checkbox"/> Research and Managing Information <input type="checkbox"/> Creativity and Innovation <input type="checkbox"/> Communication <input type="checkbox"/> Collaboration <input type="checkbox"/> Citizenship <input type="checkbox"/> Personal Growth and Well-being	<input type="checkbox"/> Critical Thinking <input type="checkbox"/> Problem-Solving <input type="checkbox"/> Research and Managing Information <input type="checkbox"/> Creativity and Innovation <input type="checkbox"/> Communication <input type="checkbox"/> Collaboration <input type="checkbox"/> Citizenship <input type="checkbox"/> Personal Growth and Well-being	<input type="checkbox"/> Critical Thinking <input type="checkbox"/> Problem-Solving <input type="checkbox"/> Research and Managing Information <input type="checkbox"/> Creativity and Innovation <input type="checkbox"/> Communication <input type="checkbox"/> Collaboration <input type="checkbox"/> Citizenship <input type="checkbox"/> Personal Growth and Well-being	<input type="checkbox"/> Critical Thinking <input type="checkbox"/> Problem-Solving <input type="checkbox"/> Research and Managing Information <input type="checkbox"/> Creativity and Innovation <input type="checkbox"/> Communication <input type="checkbox"/> Collaboration <input type="checkbox"/> Citizenship <input type="checkbox"/> Personal Growth and Well-being

K-3: Group Work Expectations

Book: “[That Fruit is Mine](#)”

[Group Work reflections](#) from YouCubed





That Fruit is Mine!

Copy link

"OURS!"

said the elephants, all at once.
"Why didn't we think of that!"
Huff!
Puff!



"OURS!"

Huff!
He-e-e-eave!



"OURS!"

Stre-e-e-etch!



MORE VIDEOS

Guardian Support?

Guardian input:

- Creates a relationship with guardians
- They can share insight into the strengths and struggles of that individual.
- Shows guardians you value their input.

The goal is to create relationships with your students by knowing their interests, hobbies, likes and dislikes.

Possible [letter](#) to use.





In Summary

Building Trust & Beliefs
Inspiring Curiosity
Promoting Collaboration
Establishing Expectations
Math Activities

In the CHAT: What is an actionable item you will move forward with?

APLC Post Session Survey

Thank you for attending this session. To help us enhance the delivery of future sessions, we ask that you complete this short survey. **Your feedback is important and appreciated!**

Note: Your survey will be submitted anonymously.

Survey: <https://arpdc.ab.ca/survey/?id=14315>



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Companion Slides

<https://bit.ly/k3mathstart>

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