180 Days of
Number Sense Routines
Grade 5
Days 161-180

Calvert County Public Schools

180 Days of
Number Sense Routines

WHY IS DEVELOPING NUMBER SENSE IMPORTANT? Number Sense is the foundational building block for all strands of mathematics. Students who struggle in mathematics do not lack mathematical ability, but rather, they simply do not have a strong number sense on which to build their knowledge. Just as we are not born knowing how to read, we are not born with Number Sense. It must be developed and nurtured over time through a progression of understandings about numbers and their relationships to one another. With time and focused practice, students come to understand that numbers are meaningful, and outcomes are sensible and expected. Number Sense development encourages students to think flexibly and promotes confidence with numbers.

WHAT IS A NUMBER SENSE ROUTINE? A routine is an activity or event that occurs on a regular basis over time. Routines provide a framework for our day to support both the teacher and students. Routines help to build community and create a safe learning environment for students. Routines build a sense of belonging, ownership, and predictability which make the classroom a place to take risks. We learn through risk-taking; we take risks when we feel safe; we feel safe in a supportive learning environment; we create supportive learning environments through routines. Just as we have established routines for bus dismissal and fire drills, we must also establish routines that build mathematical thinking and discourse.

180 Days of
Number Sense Routines

HOW WILL THESE NUMBER SENSE ROUTINES BENEFIT ME AND MY STUDENTS? What teachers do and how they do it is critically important and has a profound impact on the quality of the educational experience of our students. Effective pedagogy, the art and science of teaching, is a key element in the learning process. The Number Sense are models of effective pedagogy and ensure that the critical Number Sense instruction we provide is equitable to all our students regardless of geography, teacher experience, or student circumstance. As we prepare our students to be mathematically proficient in their lives beyond the classroom walls, these Number Sense routines will help to lay the critical foundation for all future mathematical endeavors.

WHAT ARE THE CCPS IMPLEMENTATION EXPECTATIONS? Number sense routines have been developed for all 180 instructional days in grades 1-5. These routines are to be used every day, including early dismissal, late arrival, and field trip days. Because the routines do not require a specific order, it is permissible to trade routines among days to best match the time available. Number Sense must be built over time. With consistency, we can build students' number sense creating a strong mathematical foundation. If students or the teacher is struggling with a routine, it is expected that the teacher collaborate with colleagues to build capacity in that routine – do not just choose to skip the routine. If additional help is needed, the teacher should seek the assistance of their content specialist or mathematics supervisor.

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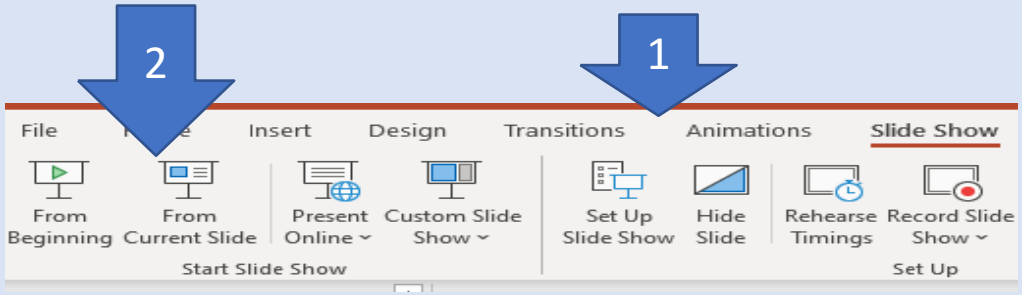
Number Sense Routines

HOW TO RUN POWERPOINT IN SLIDE SHOW MODE:

Slides with animation features, must run in Slide Show mode of PowerPoint for the animations to work correctly.

1. Select <Slide Show> from the menu at the top
2. Select <From Current Slide>



HOW TO ANNOTATE STUDENT THINKING ON THE SLIDE:

- With the slide in Slide Show mode, right click on the slide
- Select <Pointer Options> then choose <Pen>

180 Days of
Number Sense Routines

Acknowledgements

We are grateful to those who have inspired this project – and there have been many. These slide decks were designed for Grades 1–5 with custom-built daily routines for each grade level. The nine routines blend original creations, adaptations, and borrowed OER materials. We have made our work available in Open Educational Resources so that others may benefit as we have. Our deepest gratitude and respect to all those who helped move our work forward, and a special thank you goes to the following whose own work had such a tremendous impact on our 180 Days of Number Sense Routines:

- *Decide & Defend* and *Quick Count* routines were adapted from templates created by Grace Kelemanik and Amy Lucenta at http://FosteringMathPractices.com
- *Estimation Clipboard, Esti-Mysteries,* and *Splat!* templates created by www.SteveWyborney.com
- *Same But Different* discussion from Developing Grayscale Thinking by Looney Math Consulting at https://www.samebutdifferentmath.com
- *Which One Doesn't Belong* tasks adapted from http://wodb.ca by Mary Bourassa

Day 161

Estimation Activity

PROMPTS:
PART 1: What is the DIFFERENCE in glass gems between the two cups?
PART 2: How many are in the second cup?

Teacher Note: Resist the urge to "click through" these slides too quickly. The power of this routine is the thinking and the discussion of that thinking – not the solution.

Where you should linger for extended discussion:

- After the prompt "What is the mathematical difference?" is revealed.
- After the prompt "How many are in each cup?" is revealed.

Note: The next slide is not "messed up". When you are ready to use this activity, use the PowerPoint platform so the animation on the slides works properly.

ESTIMATION

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The difference is 7 glass gems.

What is the mathematical difference?

How many are in each cup?

19 glass gems	?

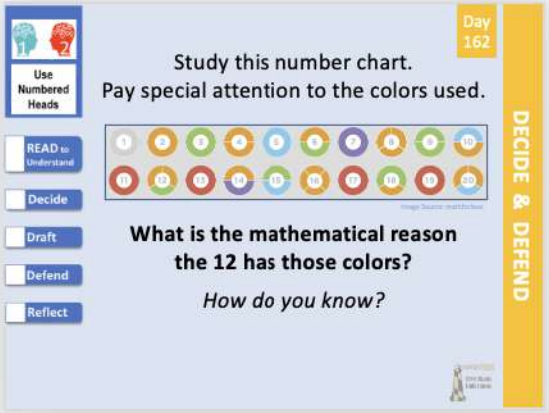
26 glass gems	?

Use the NEXT SLIDES with students.

Here is are some possible responses. This list is not all-inclusive.
Additional ideas encouraged!

Day 162

DECIDE & DEFEND



GIVE AMPLE TIME for students to study and grapple with the organization of this chart!
This color chart comes from a game called the Prime Climb by Math for Love.
Notice that the Prime Numbers have only 1 color.
Each prime number has its own unique color. Primes numbers 11 or greater, all use the color red.

The number 4, for example, is made from 2x2, so it needs two orange parts to represent the two prime numbers that are multiplied to get a product of 4.
The number 6 is a multiple of 2 and 3, so it takes the colors from 2 and 3 to make its own color.
Since 12 is 2x2x3, it has two orange parts (2) and one green part (3).
Each number is made from a color that results from the prime factors of that number. If the number is prime, it gets its own color.

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Use Numbered Heads

READ to Understand

Decide

Draft

Defend

Reflect

Day 162

Study this number chart.
Pay special attention to the colors used.

Image Source: mathforlove

What is the mathematical reason the 12 has those colors?

How do you know?

DECIDE & DEFEND

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Day 162

Reflect on Learning

- A new math idea I learned today is…
- To convince others of your ideas, it is important to…

DECIDE & DEFEND

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Intro

SAME BUT DIFFERENT

About the SAME BUT DIFFERENT Routine

Same But Different is a powerful routine for use in math classrooms. The *Same but Different* routine compares two things **calling attention to both how they are the same and how they are different**. This apparent paradox is the beauty of the activity. In this analysis, *instead of making a choice and trying to prove that these are the same or prove that they are different, **students consider how two items can be both**.* This is a critically important distinction from many other tasks.

One of the reasons students struggle in math is that they struggle to make connections. Someone who has poorly developed number sense might see each number as its own thing, and not part of the larger network of mathematical ideas. A mathematical conversation using the language *same but different* that calls attention to how a new concept in math is the same as another familiar and comfortable concept but different in a specific way is a useful conversation in growing a student's network of connections. Building these connections could also reduce anxiety as children become the sense-makers in the conversation.

Source: www.samebutdifferent.net.com/about

Facilitating the SAME BUT DIFFERENT Routine

1. Present the slide
2. Ask students to THINK about how the two items are both the SAME AND DIFFERENT.
3. Do not allow conversation at this time -- give ample think time for students to consider the possibilities
4. After some time has been given (a minute or so), ask students to talk with their Number Head partner or small group about their ideas -- allow this conversation to dominate the time dedicated to this routine
5. As students talk with partners/groups, walk around and listen to the conversations. Resist jumping in; let them grapple with the ideas with their peers.
6. As you walk around listening, take notes. You will use these notes to help direct the whole group conversation.
7. Refocus student attention to the front of the room for a whole group debriefing session. Ask students to share some of their ideas about how the two were both the SAME and DIFFERENT – use the notes you took to bring out important ideas that will benefit the entire room.

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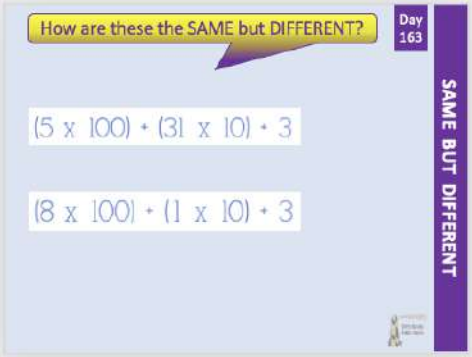
Use the NEXT SLIDE with students.

Here is are some possible responses. This list is not all-inclusive.
Additional ideas encouraged!

Day 163

- Students may simply recognize a component that makes them the “same” OR “different”
- Some students may state a same/different relationship and say that they are the “same because…. But different because….”



The expressions are different, but the total value is the same (813)
5 groups of 100 plus 10 groups of 31 has the same value as 8 groups of 100 plus 10 groups of 1

SAME:
- Both have a value of 813
- Both make use of parentheses
- Both have a value multiplied by 100 and 10
- Both have 3 added at the end

DIFFERENT
- The first has 5 groups of 100 / The second has 8 groups of 100
- The first has 31 groups of 10 / The second has 1 group of 10

SAME BUT DIFFERENT

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How are these the SAME but DIFFERENT?

Day 163

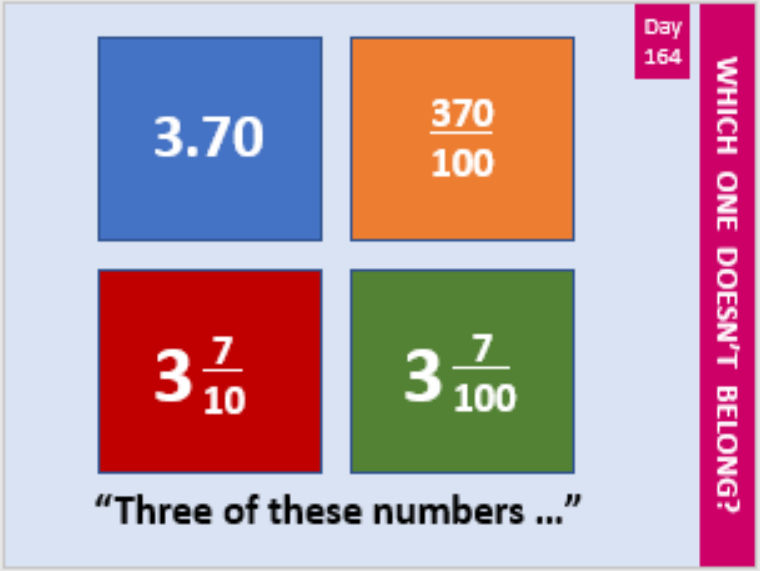
SAME BUT DIFFERENT

$$(5 \times 100) + (31 \times 10) + 3$$

$$(8 \times 100) + (1 \times 10) + 3$$

Use the NEXT SLIDE with students.

Here is are some possible responses. This list is not all-inclusive.
Additional ideas encouraged!



Possible Responses:

- Three of these numbers are in fraction form. A is not is fraction form.
- Three of these numbers have a written denominator that is larger than the numerator. B has a numerator that has a larger value than the denominator.
- Three of these numbers have a value expressed to the hundredths place. C is not expressed to the hundredths place – it is to the tenths place value.
- Three of these numbers have a value that is equivalent to 3 and seven tenths or 3 and 70 hundredths. D is equivalent to 3 and 7 hundredths.

Day 164
WHICH ONE DOESN'T BELONG?

Day 164

WHICH ONE DOESN'T BELONG?

A

3.70

B

$\frac{370}{100}$

C

$3\frac{7}{10}$

D

$3\frac{7}{100}$

"Three of these numbers …"

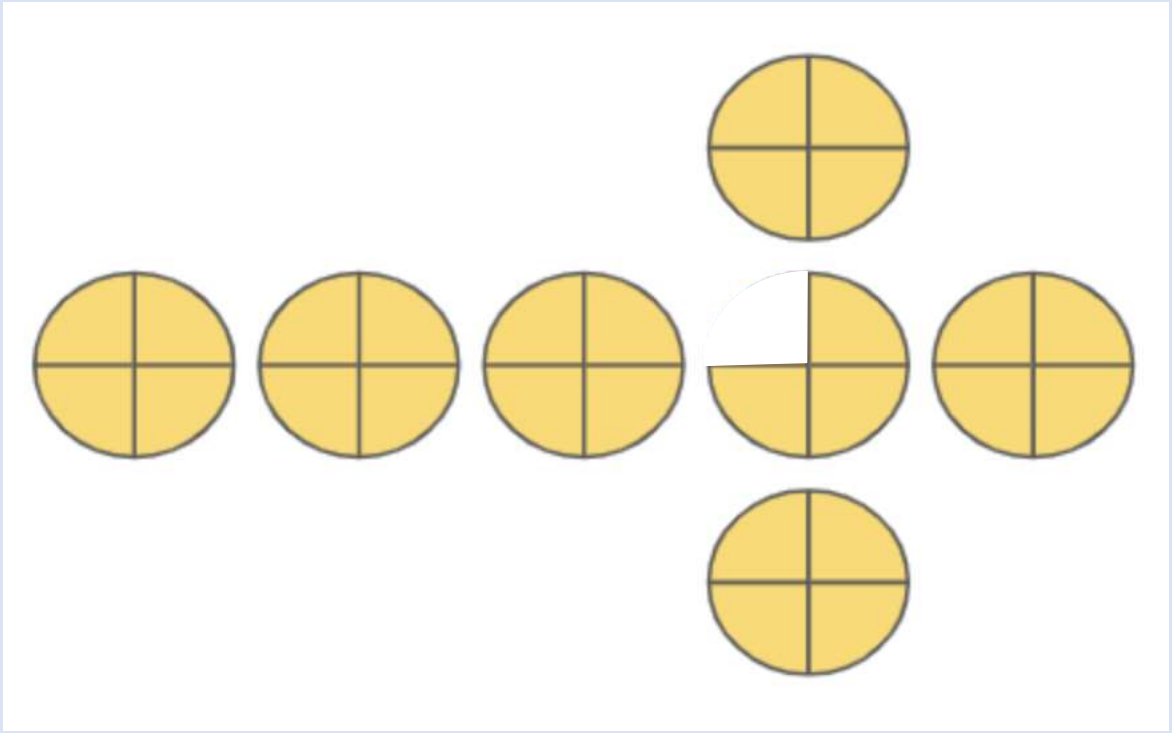
Directions for QUICK COUNT routines

Quick Count is an instructional routine designed to shift attention away from mindless calculations and toward necessary structural interpretations of mathematics. This routine fosters structural thinking, Math Practice 7, and promotes student discourse.

1. Pair students into Numbered Heads (or Peanut Butter Jelly partners, etc.)
2. Show students the first image slide for about 3-5 seconds depending on the complexity of the image and level/experience of the students.
3. With their partner, students discuss everything they can remember about the image.
4. After a minute of partner discussions, have students share ideas to the group.
5. Create a list of student ideas that students can refer to when the image is shown again.
6. Tell students that you are going to put the slide back up. Ask students to COUNT the images using some type of shortcut strategy (chunking, symmetry, arrays…)
7. Show the image again and leave it displayed as students look for counting shortcuts.
8. With their partner again, students discuss how many objects are in the image and how describe the shortcut counting strategy they used. Give time for partner discussions. Walk around and take notes about discussions to determine which students will share.
9. Use the slide with identical images as a comparative visual as students take turns explaining how they counted the objects in the image.
    - Use your notes to select different students with different approaches.
    - The student explains his/her shortcut as the teacher **gestures** over the image.
    - A **different student** is asked to **REPEAT the original student's shortcut** as the teacher **annotates** (circles, underlines) on the image to show the shortcut used.
    - Repeat the process using different student-generated shortcut strategies.
10. End by asking students to explain what was "mathematically important"

Day 165

What do you NOTICE?



QUICK COUNT

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Day 165

QUICK COUNT

What did you NOTICE?

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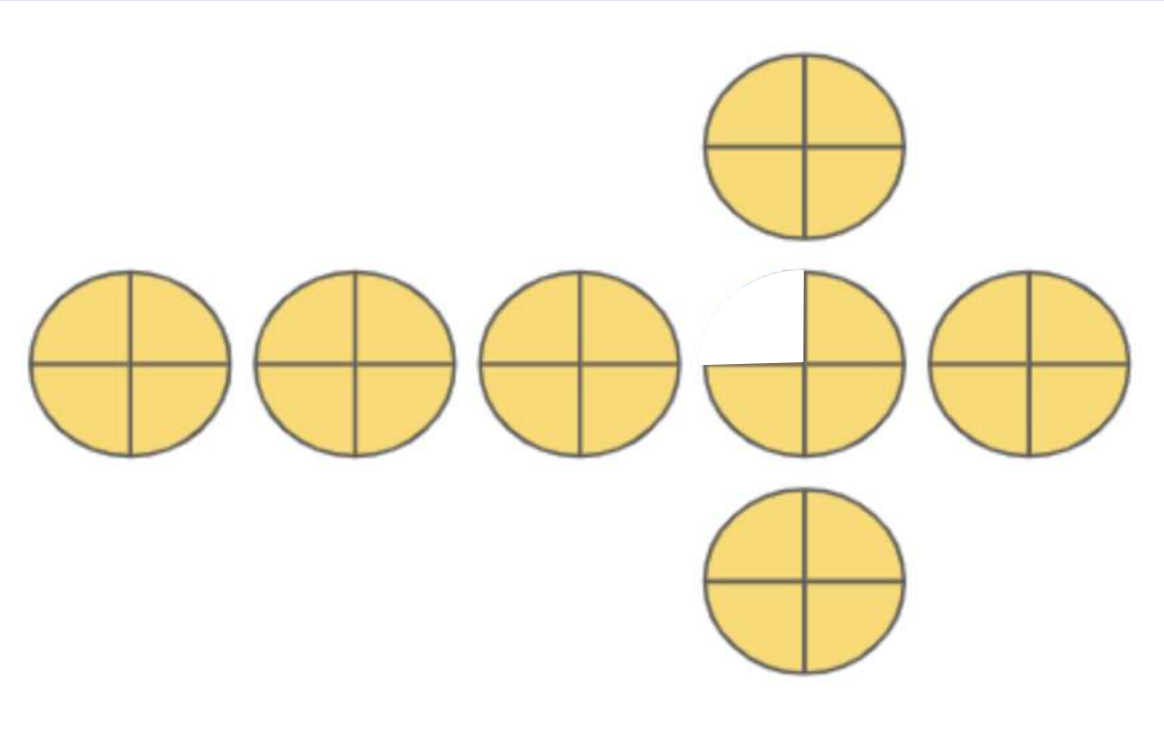
Day 165

How many **quarter pieces**?

What counting shortcut did you use?



QUICK COUNT

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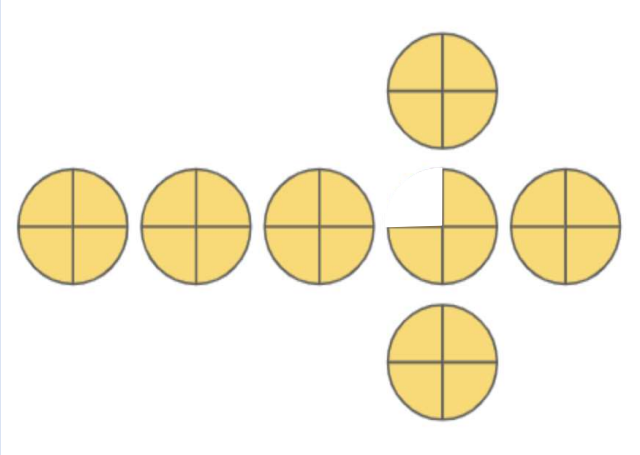
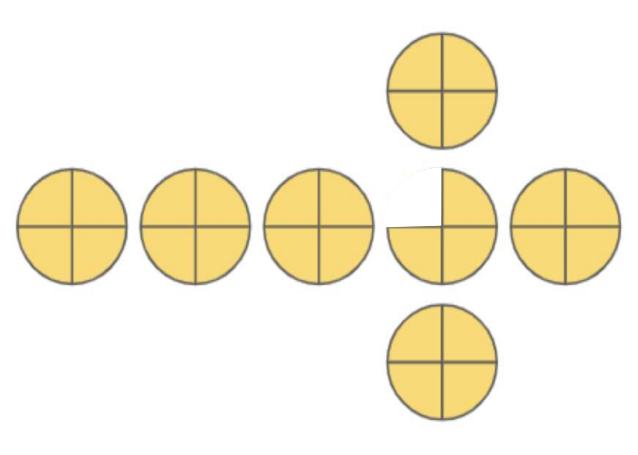
I noticed ____ so I _____

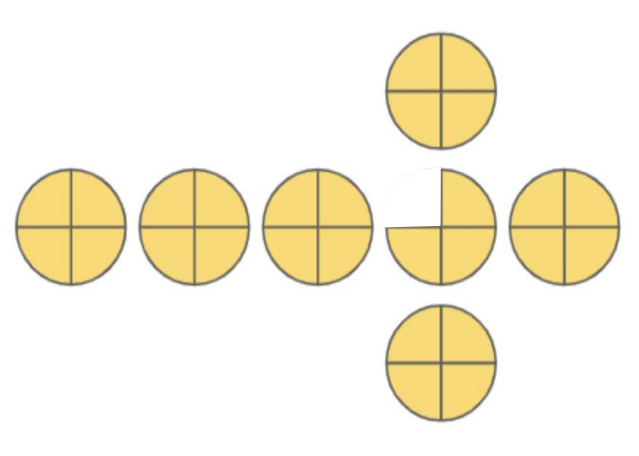
(They) noticed ____ so they___

Day 165

QUICK COUNT







Day 165

Reflect

What was mathematically important?

QUICK COUNT

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Day 166

CHORAL COUNTING

FACILITATION NOTES

SAY: Today for our Choral Counting routine, we are going to work with all four operations (add/subtract/multiply/divide) with the number 10.

The beginning of each row has a starting number for that row. We will work from left to right doing what the operation in the top of each box says to do with the number as we move across the columns.

Remember, like all of our Choral Counting routines, we are looking for PATTERNS so be on the lookout for the patterns that we can discuss when we finish counting.

57	+ 67	– 57	X 570	÷ 57
42	+ 52	– 42	X 420	÷ 42
65	+ 75	– 65	X 650	÷ 65
17	+ 27	– 17	X 170	÷ 17
9	+ 19	– 9	X 90	÷ 9
183	+ 193	– 183	X 1830	÷ 183

Notice that the original number in the first column appears in the middle and last columns, too.

Explore WHY that is the pattern. There are other patterns to explore, too. Have fun!

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Operations with 10

Day 166

CHORAL COUNTING

57	+	–	x	÷
42	+	–	x	÷
65	+	–	x	÷
17	+	–	x	÷
9	+	–	x	÷
183	+	–	x	÷

Day 167

$5\frac{4}{5} - 1\frac{1}{5}$

$5\frac{4}{10} - 2\frac{2}{5}$

$5\frac{4}{10} - 2\frac{3}{5}$

TEACHER NOTES

BEFORE

The next slide has a string of expressions that you will use for today's Number Talk. Use this slide in Smart Notebook format so you can easily use the pen to annotate. Use the screen shade to show just one expression at a time.

DURING

Subtracting Fractions with Unlike Denominators

Key Ideas:

- Students should recognize that we cannot subtract when the fraction has a different denominator SINCE the size of each piece will be different!
- Remember, Number Talks are intended to be MENTAL CALCULATIONS that encourage strategy and discussion.
- Students may see 4/10 at 2/5 OR they may see 1/5 as 2/10 in order to get like denominators.
- $5\frac{4}{5} - 1\frac{1}{5} = 4\frac{3}{5}$
- $5\frac{4}{10} - 2\frac{2}{5} = 5\frac{4}{10} - 2\frac{4}{10}$ or $5\frac{2}{5} - 2\frac{2}{5} = 3$
- $5\frac{4}{10} - 2\frac{3}{5} = 5\frac{2}{5} - 2\frac{3}{5}$ or $5\frac{4}{10} - 2\frac{6}{10}$ notice that either way, the fractions cannot subtract without regrouping. $5\frac{4}{10} - 2\frac{6}{10} = (4 + \frac{10}{10} + \frac{4}{10}) - 2\frac{6}{10} = 4\frac{14}{10} - 2\frac{6}{10} = 2\frac{8}{10}$ or $2\frac{4}{5}$ there is no need to express in lowest terms, so either is acceptable

Remember, students will come with a variety of strategies. During a Number Talk, the students explain their way of thinking. When students find ways that are especially efficient, highlight those strategies in the reflection that should follow the Talk. Help students to understand a wide variety and guide them into understanding that some strategies work better in some situations, so knowing more than one way to solve an equation like this one is important so they can later choose the method that is most efficient.

AFTER

Discuss importance of common denominators when adding/subtracting since the SIZE of the PIECES

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NUMBER TALK

Day 167

$5\frac{4}{5} - 1\frac{1}{5}$

NUMBER TALK

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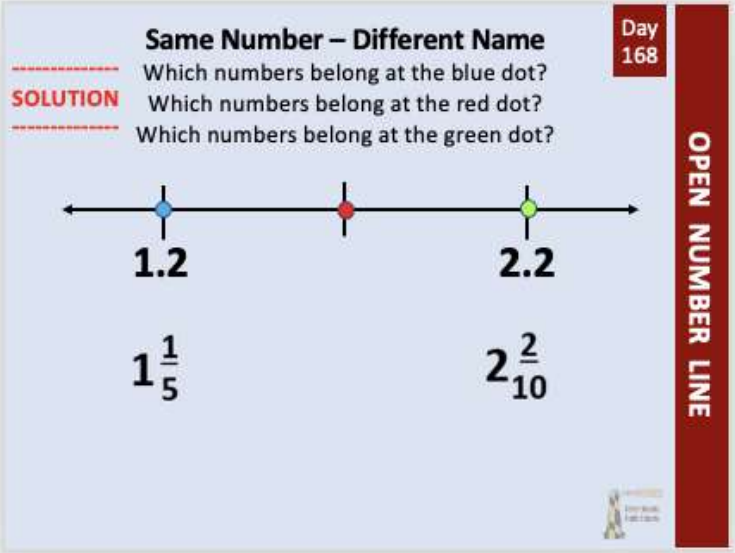
Use the NEXT SLIDE with students.

Here is are some possible responses. This list is not all-inclusive.
Additional ideas encouraged!

Day 168

OPEN NUMBER LINE



- Blue: 1-1/5
- Red: no given value goes on the red dot – the value of the red dot is 1.7 (one and seven tenths) – some students will mistakenly believe that since it is "in the middle" that it should be 1.5 – be sure to discuss this misconception
- Green: 2-2/10

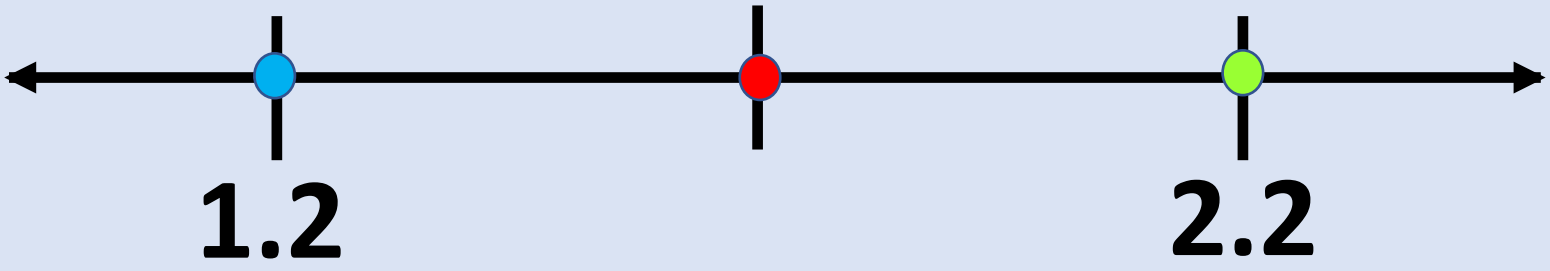
1.5 $1\frac{1}{5}$ $2\frac{1}{2}$ $2\frac{2}{10}$

Day 168

Same Number – Different Name

Match the number to the colored dots on this number line

Be ready to justify your choices.



OPEN NUMBER LINE

Day 169

SPLAT!

The total is…

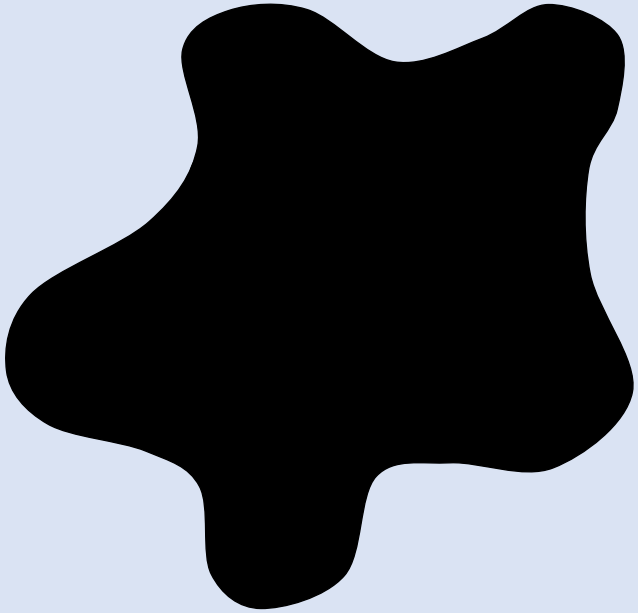
Splat!

What number is under each splat?

How do you

Let’s look under the splats to see what number is

What can we learn from this picture?



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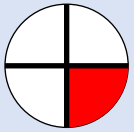

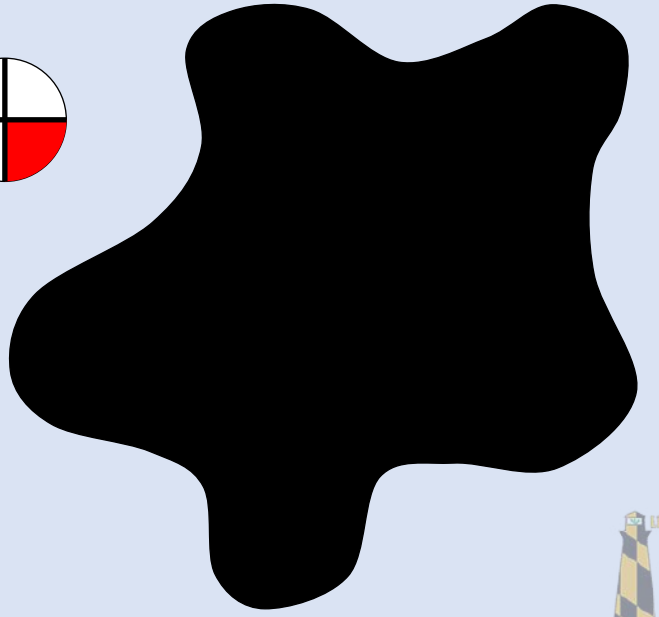

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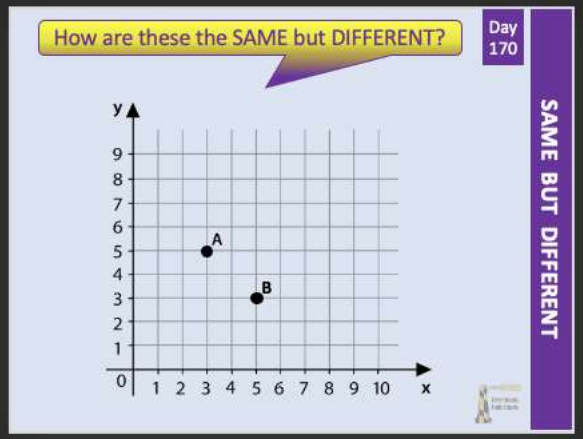
Use the NEXT SLIDE with students.

Here is are some possible responses. This list is not all-inclusive.
Additional ideas encouraged!

Day 170

SAME BUT DIFFERENT

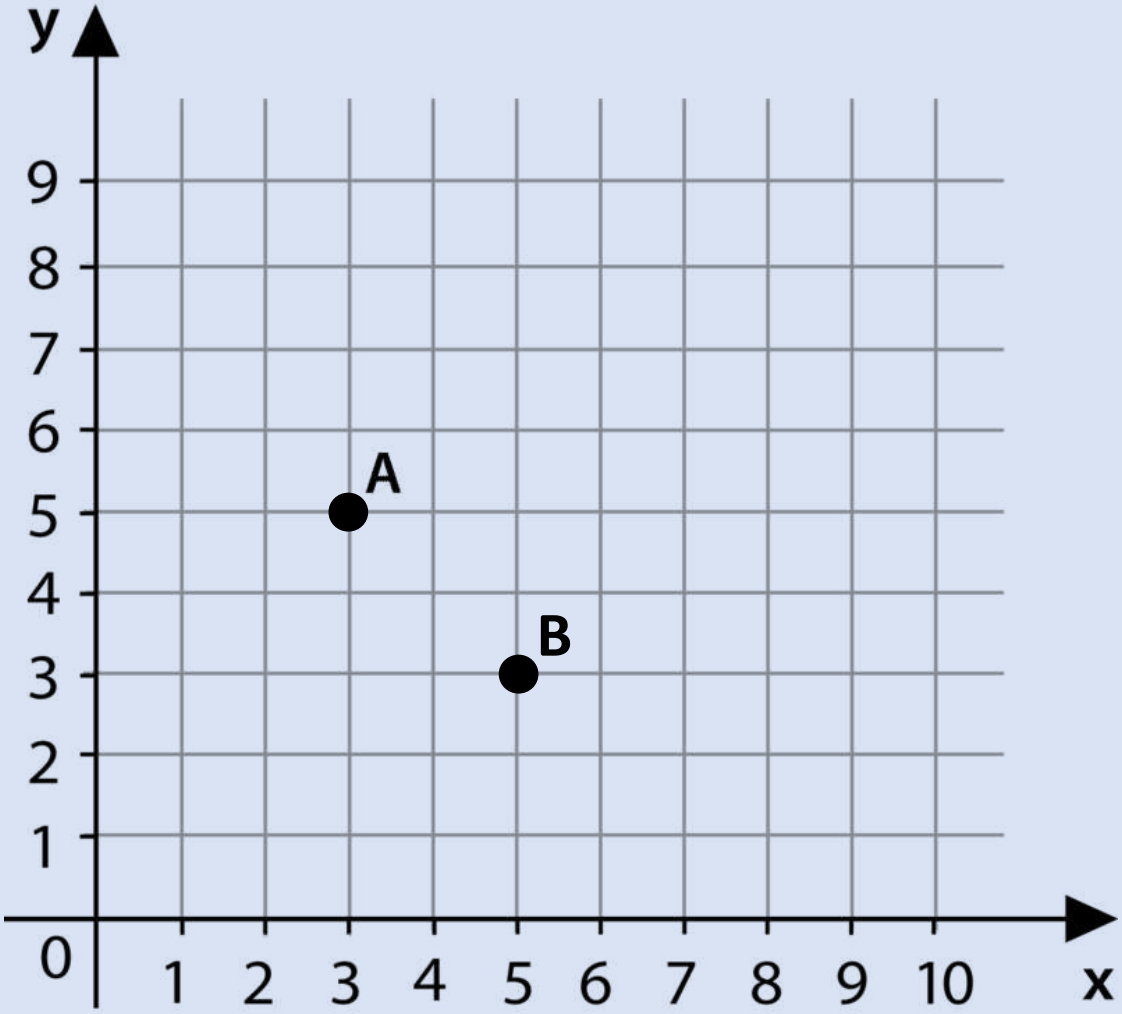
- Students may simply recognize a component that makes them the “same” OR “different”
- Some students may state a same/different relationship and say that they are the “same because…. But different because….”



Both are points in the first quadrant, but they are in different locations.
Both have coordinates of 3 and 5, but A is (5, 3) and B is (3, 5)
Both have an x and y value, but the values are not the same
Both are graphed from the origin of (0, 0) but they are not located at the same place on the graph

How are these the SAME but DIFFERENT?

Day 170



SAME BUT DIFFERENT

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Day 171

NUMBER TALK

$0.25 + \frac{3}{4}$

$0.25 + \frac{1}{8}$

$0.25 + \frac{7}{12}$

TEACHER NOTES

BEFORE

The next slide has a string of expressions that you will use for today's Number Talk. Use this slide in Smart Notebook format so you can easily use the pen to annotate. Use the screen shade to show just one expression at a time.

DURING

Adding Fractions to Decimals

Possible Responses:

- $0.25 + \frac{3}{4}$ = many students will simply recognize 0.25 at ¼ or ¾ as 0.75 and will quickly see that the total sum is 1
- $0.25 + \frac{1}{8}$ = students will likely convert 0.25 to ¼ and then use the equivalent fraction of 2/8 to add to 1/8 for a sum of 3/8
- $0.25 + \frac{7}{12}$ = 0.25 is ¼. Then ¼ = 3/12 and 3/12 + 7/12 is 10/12. It is not necessary to express in lowest terms, but some students may express this at 5/6.

Remember, students will come with a variety of strategies. During a Number Talk, the students explain their way of thinking. When students find ways that are especially efficient, highlight those strategies in the reflection that should follow the Talk. Help students to understand a wide variety and guide them into understanding that some strategies work better in some situations, so knowing more than one way to solve an equation like this one is important so they can later choose the method that is most efficient.

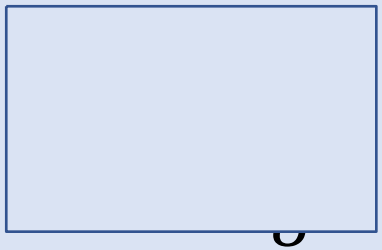
AFTER

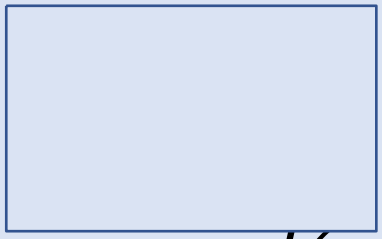
Discuss that it is difficult to add values that are not in the same representation mode. At times it is easier to convert fractions to decimals to add, while some expressions are easier to solve when the decimal is converted to a fraction since converting decimals to fractions is always and easy tasks since the denominator is simply the place value name (10, 100, 1000, etc.)

Day 171

NUMBER TALK

$0.25 + \frac{3}{4}$





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Day 172

Estimation Activity

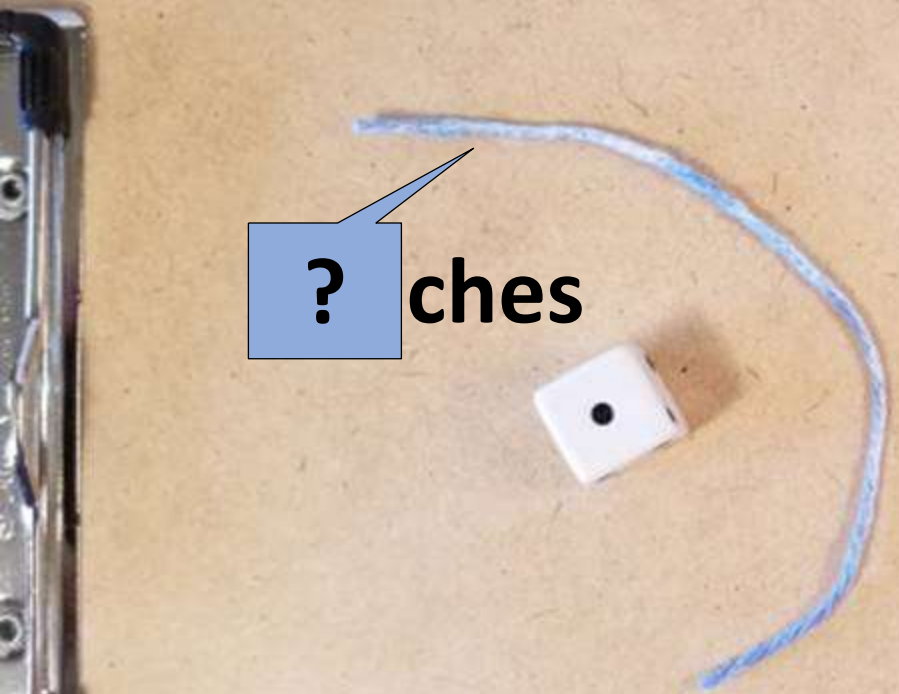
Have you already watched the teacher information video?

When you are ready to use this activity,
use the PowerPoint platform so the slides work properly.

PROMPT: **What is the length of EACH piece of yarn in whole inches?**

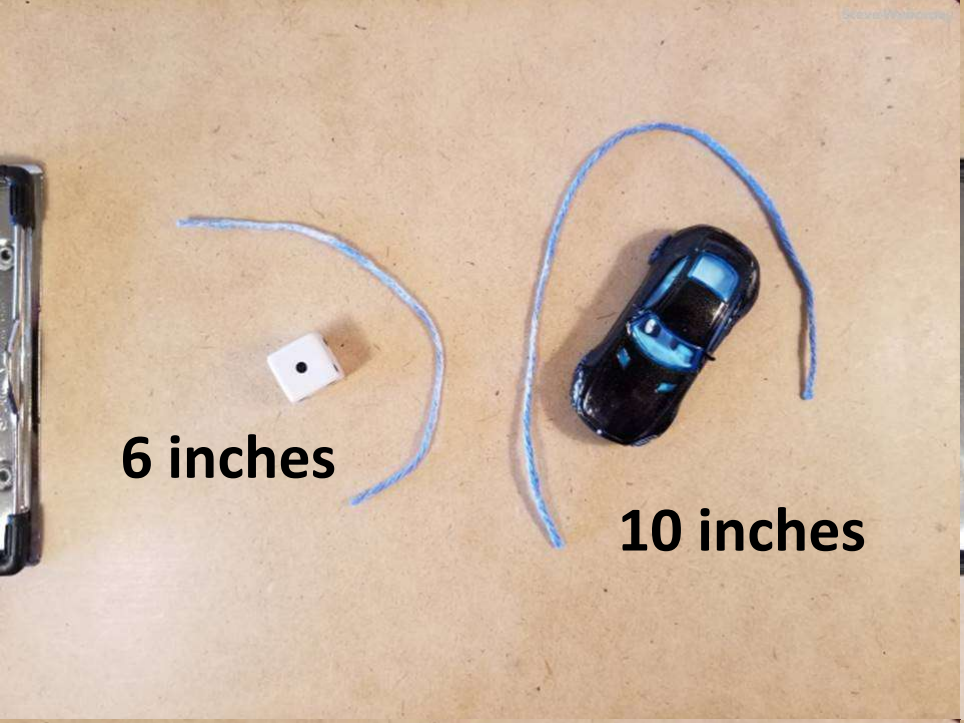
ESTIMATION

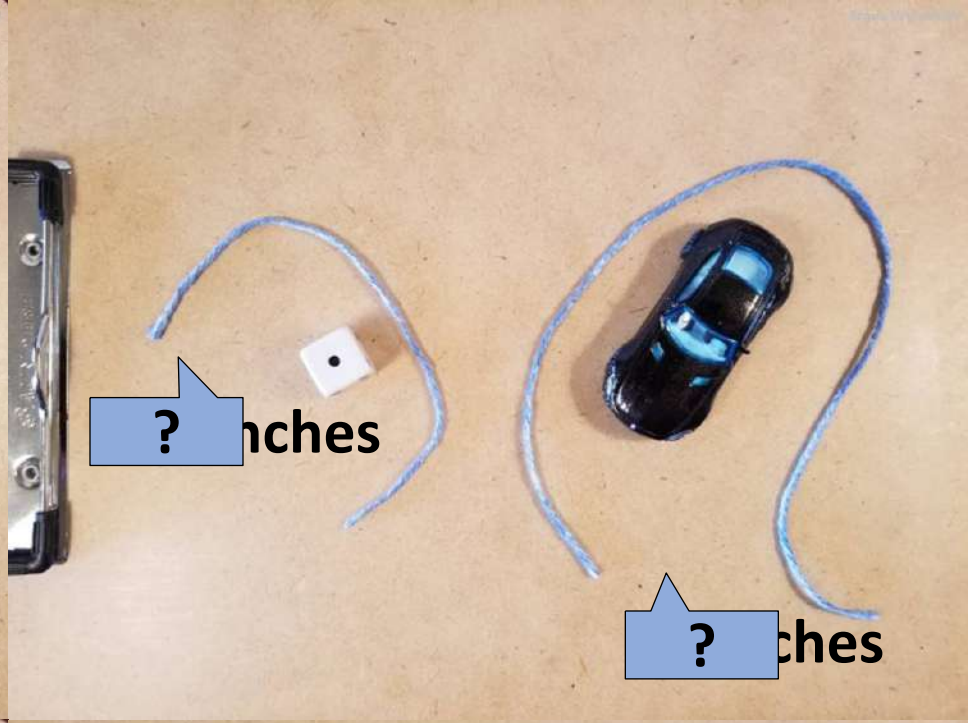
What is the length of each piece of yarn in whole inches?

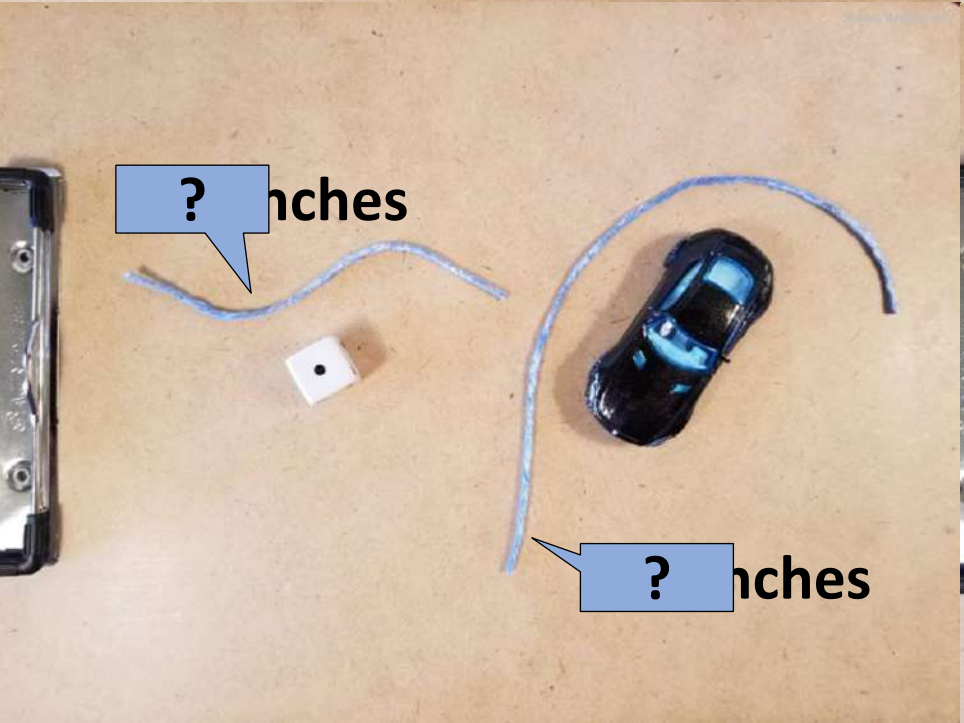


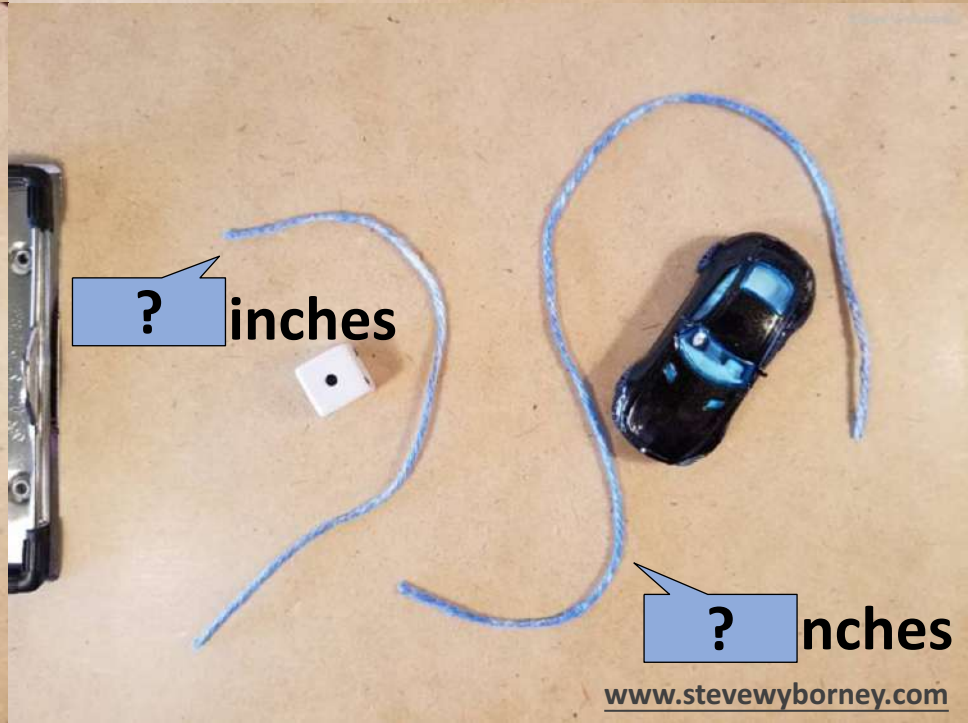
? ches

? inches









Skip Count Fractions

Day 173

CHORAL COUNTING

- **SAY:** Today we will Choral Count by one-fourths. We'll begin with the number one-fourths. Remember to count slowly and all together so I can record the count on the chart. When a fraction is equivalent to a whole number, let's call it by it's whole number name – for example, four-fourths would be called 1 instead of saying four-fourths. When we finish we will talk about the PATTERNS that have emerged so look for the patterns as we count and chart the numbers so we can discuss those patterns when we finish counting.
- Let's begin $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{2}{4}$, $1\frac{3}{4}$, 2, etc…
- Chart the responses and then DISCUSS the PATTERNS

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SKIP COUNT FRACTIONS

Be ready to discuss the patterns you see.

Can you explain WHY that pattern has occurred?

Day 173

CHORAL COUNTING

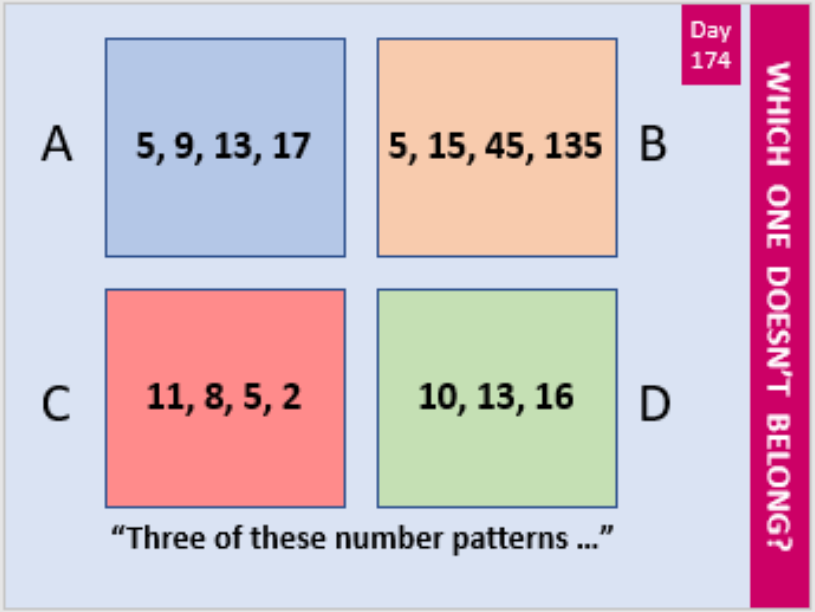
$\frac{1}{4}$							

Use the NEXT SLIDE with students.

Here is are some possible responses. This list is not all-inclusive.
Additional ideas encouraged!

Day 174

WHICH ONE DOESN'T BELONG?



Possible Responses:

- Three of these number patterns are related to an operation and the number 3. Pattern A uses the number 4, not 3
- Three of these number patterns use additive property (add/subtract). Pattern B is the only one that is multiplicative.
- Three of these number patterns have increasing value. Pattern C has decreasing values.
- Three of these number patterns show four numbers within the pattern. Pattern D only shows 3 numbers in the pattern.

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Day 174

WHICH ONE DOESN'T BELONG?

A

5, 9, 13, 17

5, 15, 45, 135

B

C

11, 8, 5, 2

10, 13, 16

D

"Three of these number patterns …"

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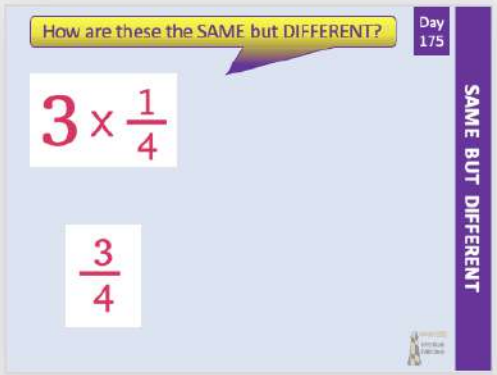
Use the NEXT SLIDE with students.

Here is are some possible responses. This list is not all-inclusive.
Additional ideas encouraged!

Day 175

SAME BUT DIFFERENT

- Students may simply recognize a component that makes them the “same” OR “different”
- Some students may state a same/different relationship and say that they are the “same because…. But different because….”



They both have a value of ¾ but are represented in different ways.

SAME:
- Both have a value ¾
- Both have an overall value that is less than 1 whole.

DIFFERENT
- The first is 3 groups of ¼. The second is ¾ of the whole.
- The first is asking for the product of two numbers. The second is simply a single value.
- The first is a multiplication expression made up of 2 numbers and an operation symbol. The second is a number.

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How are these the SAME but DIFFERENT?

Day 175

$3 \times \frac{1}{4}$

$\frac{3}{4}$

SAME BUT DIFFERENT

Day 176

DECIDE & DEFEND

Using the DECIDE & DEFEND routine

As you do this routine with students, USE the CHECKLIST on the left side of the problem as a way to help organize the thinking process

- **READ to Understand:** Begin by having students discuss the question being asked. At this time, do NOT focus on the math calculations required or the answer. This step is designed for students to understand the context of the question (What is the gist of the question?)

- **DECIDE**: Pair or group students. Using a consistent pairing will make this routine more fluid so you do not have to take time to pair students every time you want them to discuss. Have students discuss the question and discuss the question and decide which solution is correct (note: partners may not agree and that is fine provided they can justify their own thinking).

- **DRAFT**: Students draft a statement about their ideas (either as a group or individually and it can be written or oral – teacher's choice)

- **DEFEND**: Students share their ideas and defend their reasoning with the whole group. Encourage active listening and accountable talk.

- **RELECT**: To further develop comprehension, have students use ONE of the sentence starters on the "Reflect on Learning" slide after they have discussed and listened to new ideas with classmates.

NOTE: This is the CCPS adaptation of the original Decide and Defend protocol

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Use the NEXT SLIDES with students.

Here is are some possible responses. This list is not all-inclusive.
Additional ideas encouraged!

Day 176

Green and Purple
21 is a factor of 3 and 7, so it will take the colors used for 3 and 7.
Notice that the Prime Numbers have only 1 color.
The number 4, for example, is made from 2x2, so it needs two orange parts.
The number 6 is a multiple of 2 and 3, so it takes the colors from 2 and 3 to make its own color.
Since 12 is 2x2x3, it has two orange parts (2) and one green part (3).
Each number is made from a color that results from the prime factors of that number. If the number is prime, it gets its own color.
Note: All prime numbers 11 or greater, use red as their color.

DECIDE & DEFEND

Day 176

Use Numbered Heads

READ to Understand

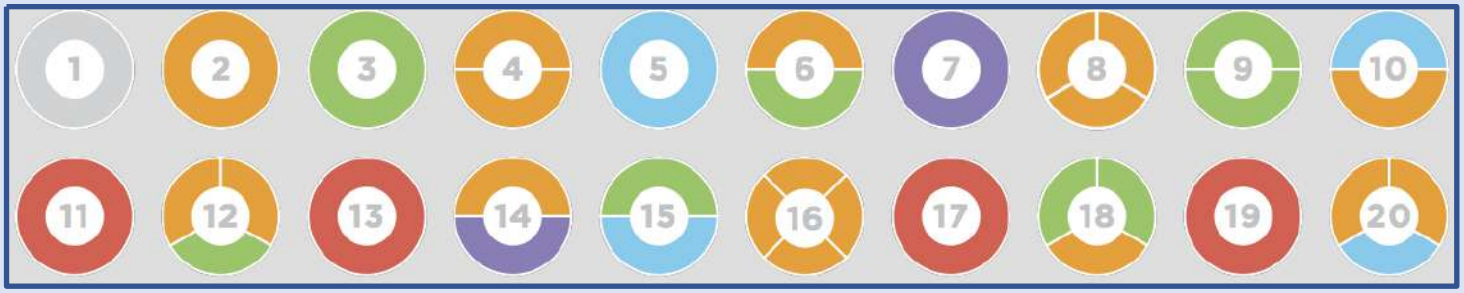
Decide

Draft

Defend

Reflect

Study this number chart.
Pay special attention to the colors used.



The next number is 21.

What colors will be used for 21?

DECIDE & DEFEND

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Use Numbered Heads

READ to Understand

Decide

Draft

Defend

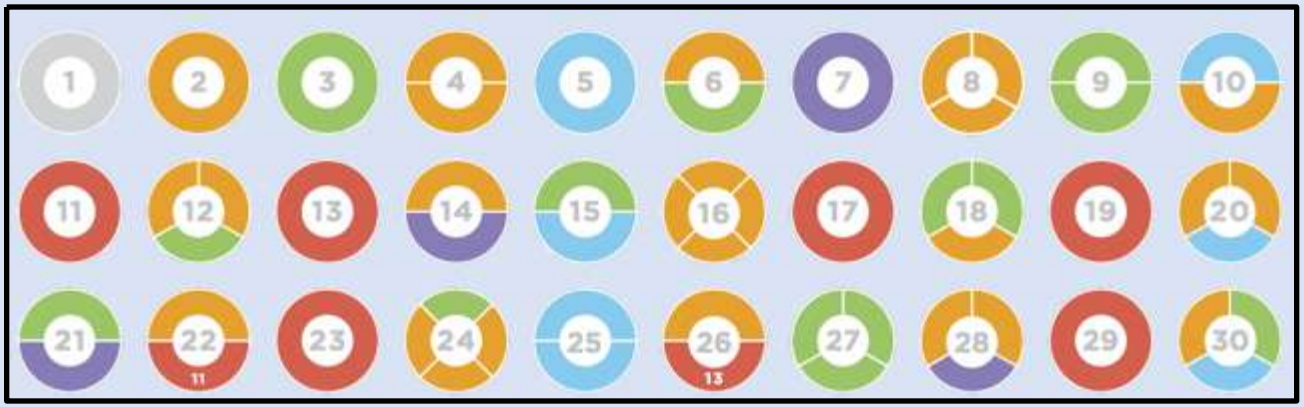
Reflect

Here's the SOLUTION – But WHY?

Day 176

The next number is 21.

What colors will be used for 21?



Did you determine that it would be GREEN and PURPLE?

How did you know?

DECIDE & DEFEND

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Day 176

Reflect on Learning

- A new math idea I learned today is…
- Listening to others' ideas is useful because…
- Next time I plan to… because….

DECIDE & DEFEND

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Day 177

SPLAT!

What is the value of each BLUE circle?

What is the value of the yellow part?

What is the value of

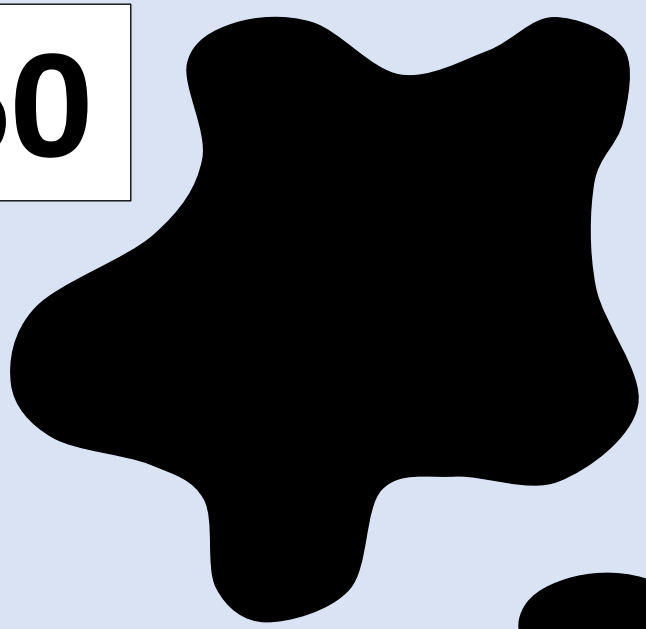
How do you know?

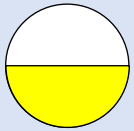
How else could you know?

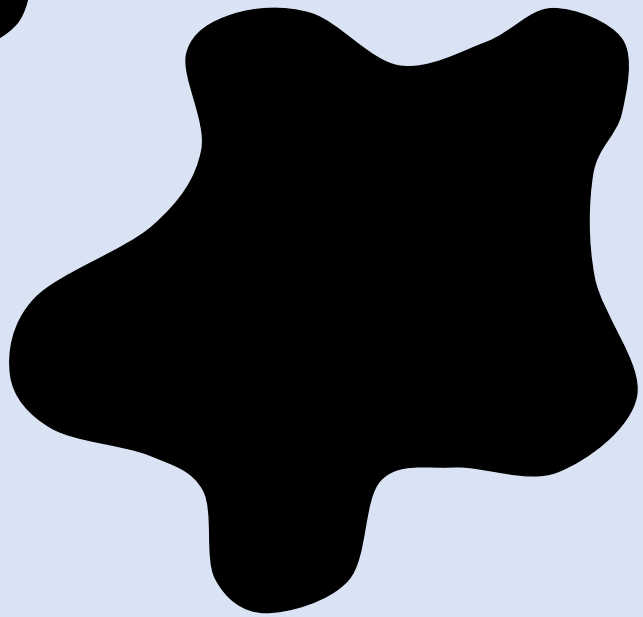
Let's look splats to value is

What can we learn from

How else could you know?







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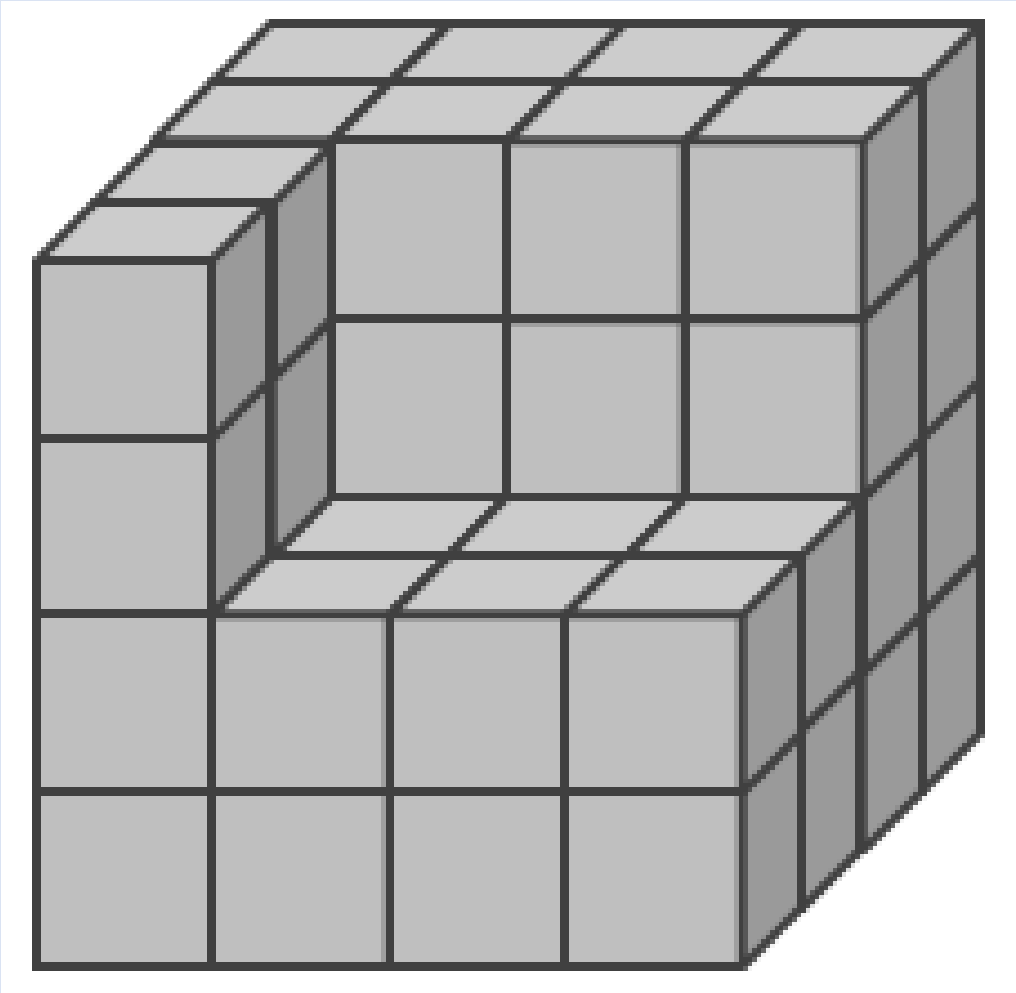
Day 178

What do you NOTICE?



QUICK COUNT

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Day
178

QUICK COUNT

What did you NOTICE?

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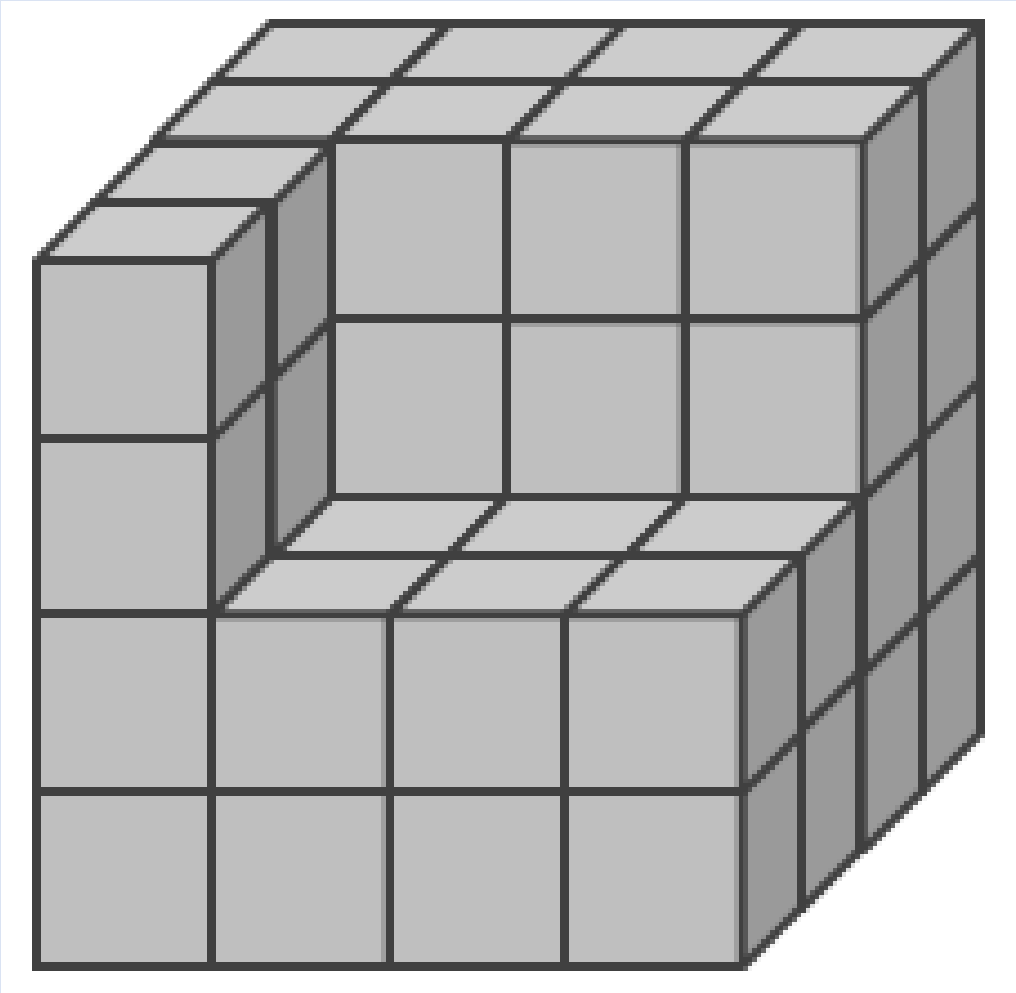
Day 178

How many do you see?

What counting shortcut did you use?



QUICK COUNT

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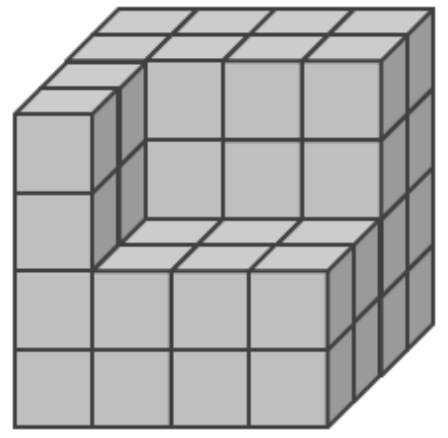
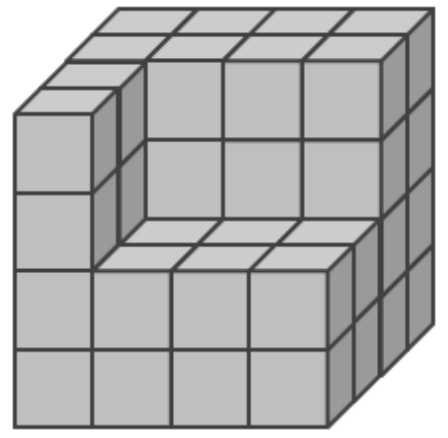
I noticed ____ so I _____

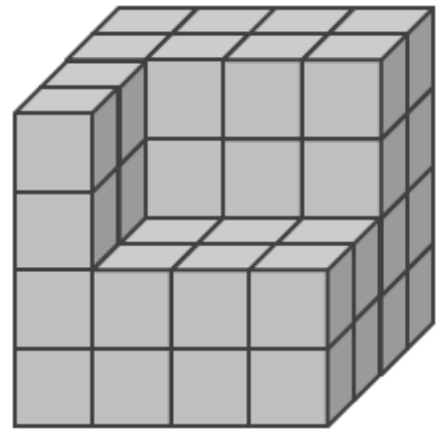
(They) noticed ____ so they___

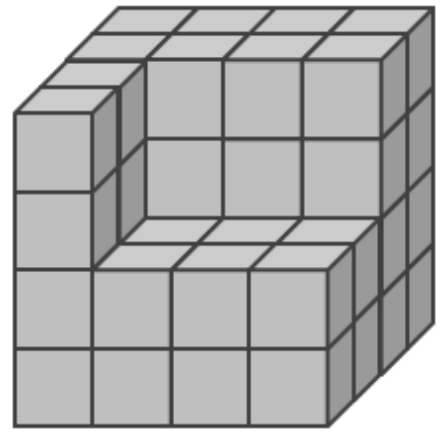
Day 178

QUICK COUNT









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Day 178

Reflect

What was mathematically important?

QUICK COUNT

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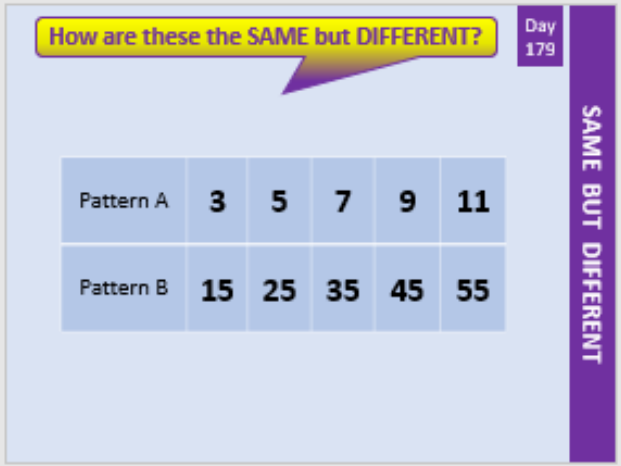
Use the NEXT SLIDE with students.

Here is are some possible responses. This list is not all-inclusive.
Additional ideas encouraged!

Day 179

SAME BUT DIFFERENT

- Students may simply recognize a component that makes them the “same” OR “different”
- Some students may state a same/different relationship and say that they are the “same because…. But different because….”



SAME:
- Both have increasing values
- Both increase through addition from the previous number within its own pattern
- Patterns A and B have a multiplicative relationship to each other (x5 or x1/5)

DIFFERENT
- Pattern A increases horizontally by +2 / Pattern B increases horizontally by +10
- Pattern A results from dividing Pattern B by 5 / Pattern B results from multiplying Pattern A by 5

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How are these the SAME but DIFFERENT?

Day 179

SAME BUT DIFFERENT

Pattern A	**3**	**5**	**7**	**9**	**11**
Pattern B	**15**	**25**	**35**	**45**	**55**

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Day 180

SPLAT!

What is the value of each BLUE circle?

What is the value of the yellow part?

What is the value of

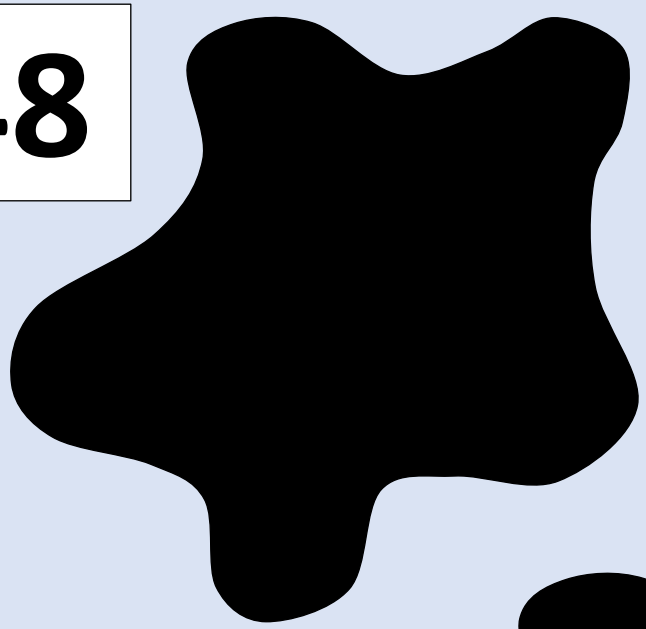
How do you know?

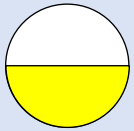
How else could you know?

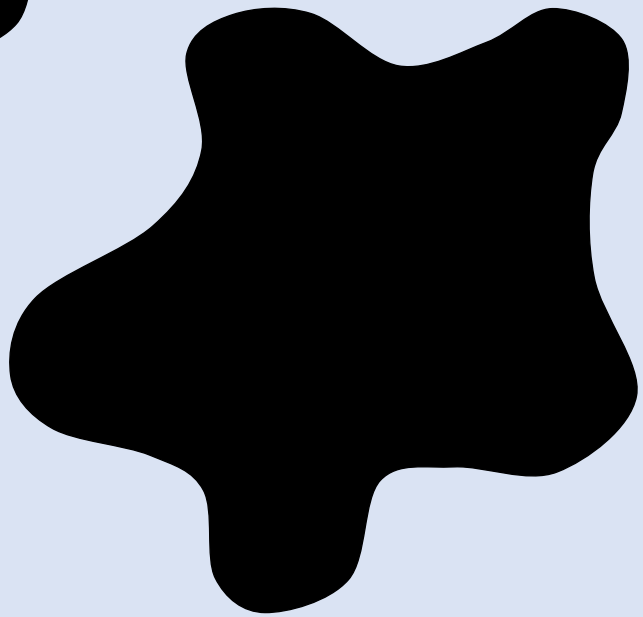
Let's look

What can we learn

How else could you know?







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