180 Days of
Number Sense Routines
Grade 4
Days 21-40

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.

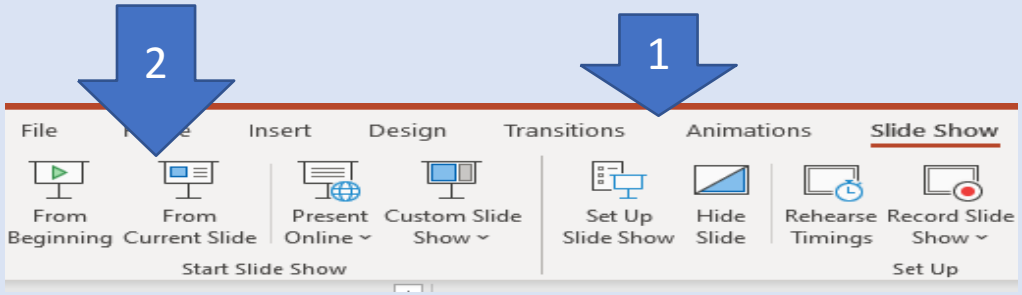
WHAT ARE THE CCPS IMPLEMENTATION EXPECTATIONS? Number sense routines have been developed for all 180 instructional days in grades 1-5. These routines are to be used every day, including early dismissal, late arrival, and field trip days. Because the routines do not require a specific order, it is permissible to trade routines among days within the week 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.

180 Days of
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 OER materials. We have made our work available in Open Educational Resources so that others may benefit as we have from the collaboration of other educators. 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
- *As Close As It Gets* https://www.mathisfigureoutable.com/ascloseasitgets by Pam Harris

Directions for the CHORAL COUNT routine

Choral Counting is an activity in which the teacher leads children in counting aloud together by a given number. As the class calls out each number, the teacher records the count on the board, pausing the count at strategic moments.

To begin, the teacher decides on a number for the students to skip count by, whether to count forwards or backwards, and what number to start and end the count on. Different numbers lend themselves well to surfacing different mathematical ideas.

The goal of this activity is not just to practice rote counting, but to engage children in reasoning, predicting, and justifying. To do this, teachers record the count so that patterns within the numbers are readily noticeable and pause during the count to ask questions like, “What do you think will come next? How do you know?”

– Tedd.org

Teacher: *Click the image to the left to see this routine in action before trying it with your students. Notice how the teacher charts the count to help make the patterns more visible to students.*

A blank grid for charting is on the next slide.

Day 21

CHORAL COUNTING

Count back by 100s – starting on 5,300

BEGIN WITH NUMBER: 5300

COUNTING RULE: -100

GOAL:

- Find PATTERNS within the counted numbers.
- Use those patterns to PREDICT numbers that will appear later in the counting sequence.

Count back by 100s – starting on 5300

Day 21

BEGIN WITH NUMBER: 5300
COUNTING RULE: subtract 100
GOAL:

- Find PATTERNS within the counted numbers.
- Use those patterns to PREDICT numbers that will appear later in the counting sequence.

	5300	5200	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

CHORAL COUNTING

4.OA.C.5

Day 22

DECIDE & DEFEND

Using the DECIDE & DEFEND routine

- **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

Day 22

Use the NEXT SLIDE with students.

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

Some students may choose to give away more because they are generous or because they don't like jellybeans. Be sure to ask WHY they made their choice. Keep the understanding of the math at the front of the conversation. Encourage discussions about the process they used: Did they start at 188 and add up to 364? Did they subtract using place value understanding? Did they simply use the algorithm? How are all of these strategies related to one another?

364 – 209 = 155
281 – 137 = 144

DECIDE & DEFEND

Day 22

Would You Rather?

Would you rather have 364 jelly beans
and give away 209
or have 281 jelly beans
and give away 137 of them?

* Include a mathematical reason in your response

DECIDE & DEFEND

4.NBT.A.2
4.NBT.B.4

Day 22

Reflect on Learning

- A new math idea I learned today is…
- Next time I plan to…

DECIDE & DEFEND

Day 23

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: **How many marbles are in the jar?**

ESTIMATION

The Reveal

41 marbles

The Reveal

The Reveal

The Reveal

Day 24

58 + 36
24 + 78
88 + 14
68 + 33

NUMBER TALK

TEACHER NOTES

BEFORE

This slide has the String of expressions that you will use for today's Number Talk. You can use Smart Ink, right click for PowerPoint Pen, or convert this slide to Smart Notebook so you can easily annotate on the slide. The annotation is an important part of the routine. The expressions should be presented one-at-a-time with skills building on one another. Remember, students will come with a wide variety of strategies. Allow student sharing of these strategies and work toward determining which of the ways were most efficient and brain-friendly.

DURING

Making Landmark or Friendly Numbers

Landmark or friendly numbers are numbers that are easy to use in mental computation. Students may adjust one or all addends by adding or subtracting amounts to make a friendly number. Multiples of ten, one hundred, one thousand, and so on, as well as twenty-five and fifty, are examples of numbers that fall into this category.

Example: 58 + 36
58 + (2 + 34)
(58 + 2) + 34
60 + 34
94
so 58 + 36 = 94 (be sure to conclude by bringing the routine full circle back to the ORIGINAL problem presented and its solution)

AFTER

After doing the Number Talk String, be sure to highlight this strategy and encourage students to "look for" places they can use it throughout the day.

Day 24

58 + 36

NUMBER TALK

4.NBT.B.4

Directions for OPEN NUMBER LINE routines

If you have never watched, or haven't watched it recently, we encourage you to watch the video that models how to use and interactive number line.
https://www.youtube.com/watch?v=p8nssffnHkM&feature=youtu.be

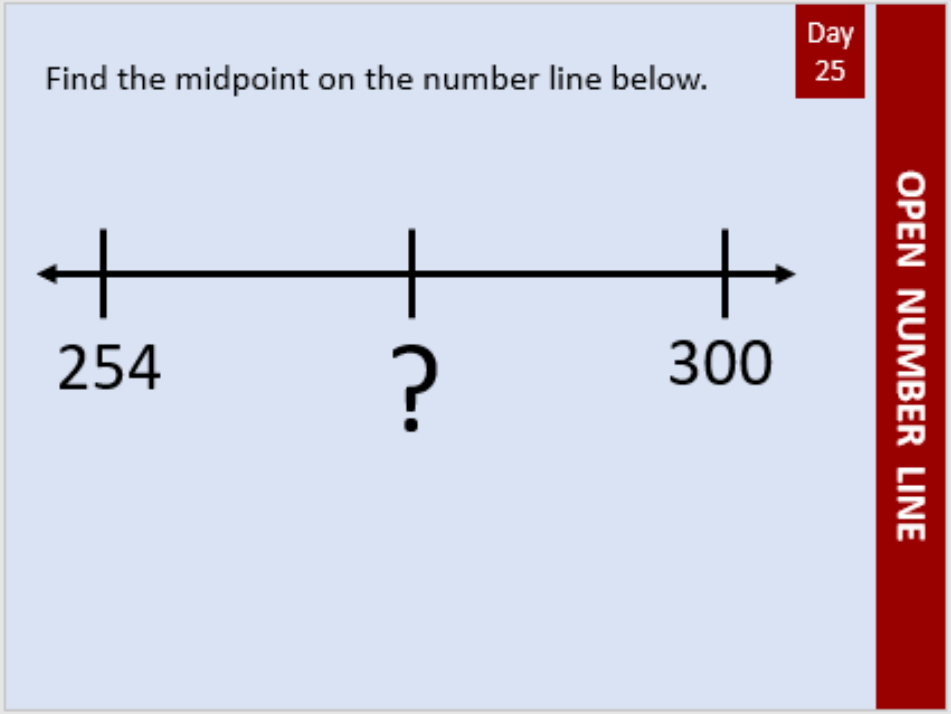
Teacher Note: You may want to create an interactive number line in your classroom for some of the Open Number Line routines. The slides provided can be used as teacher reference or used interactively if this file is "printed" as a Smart Notebook file.

For more Open Number Line Activities, visit http://www.MathSnack.blogspot.com

Day 25

Use the NEXT SLIDE with students.

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

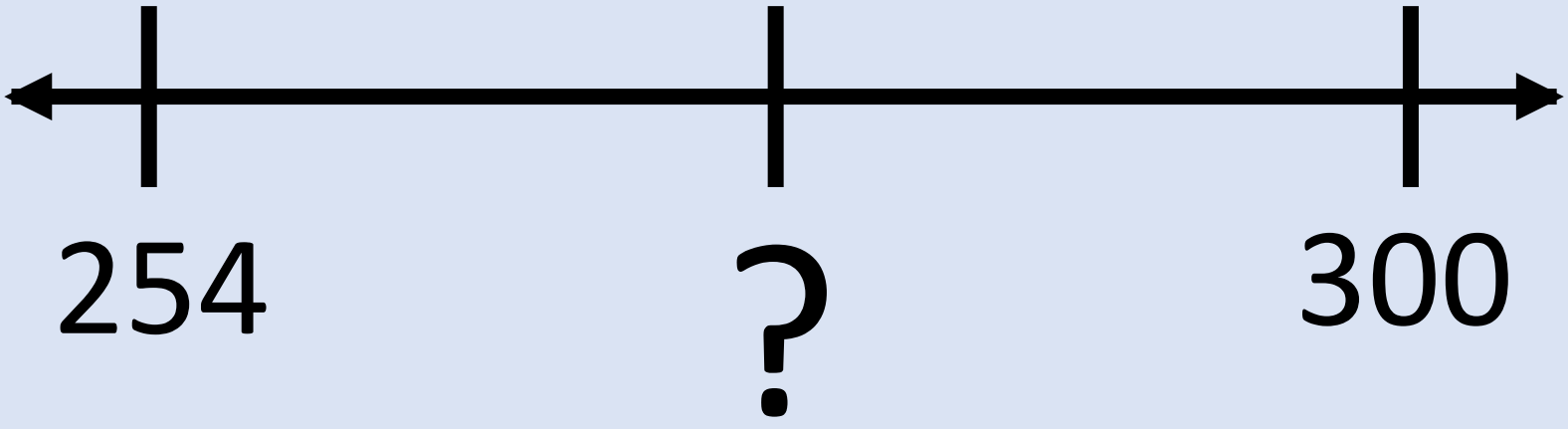


Find the midpoint on the number line.
Example: The actual midpoint is 277, the difference between 300 and 254 is 46. Half of 46 is 23, so the midpoint is 277 (254 +23 = 277 and 300 – 23 = 277).

OPEN NUMBER LINE

Day 25

Find the midpoint on the number line below.
Be ready to explain your strategy.



OPEN NUMBER LINE

4.NBT.B.4
4.R.1

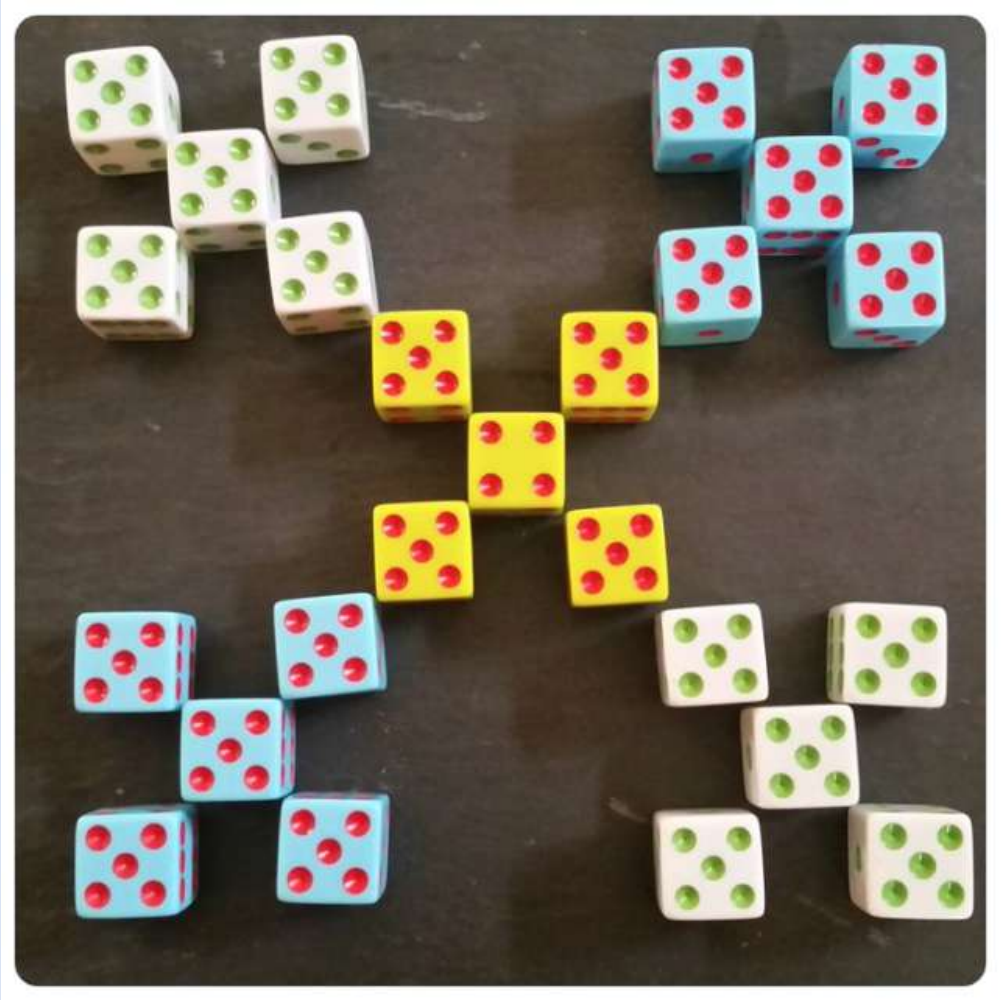
Directions for QUICK COUNT routines

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 3 different student-generated shortcut strategies.
10. End by asking students to explain what was "mathematically important"

Day 26

QUICK COUNT



What do you NOTICE?

Image Credit:

4.OA.B.4
3.OA.C.7

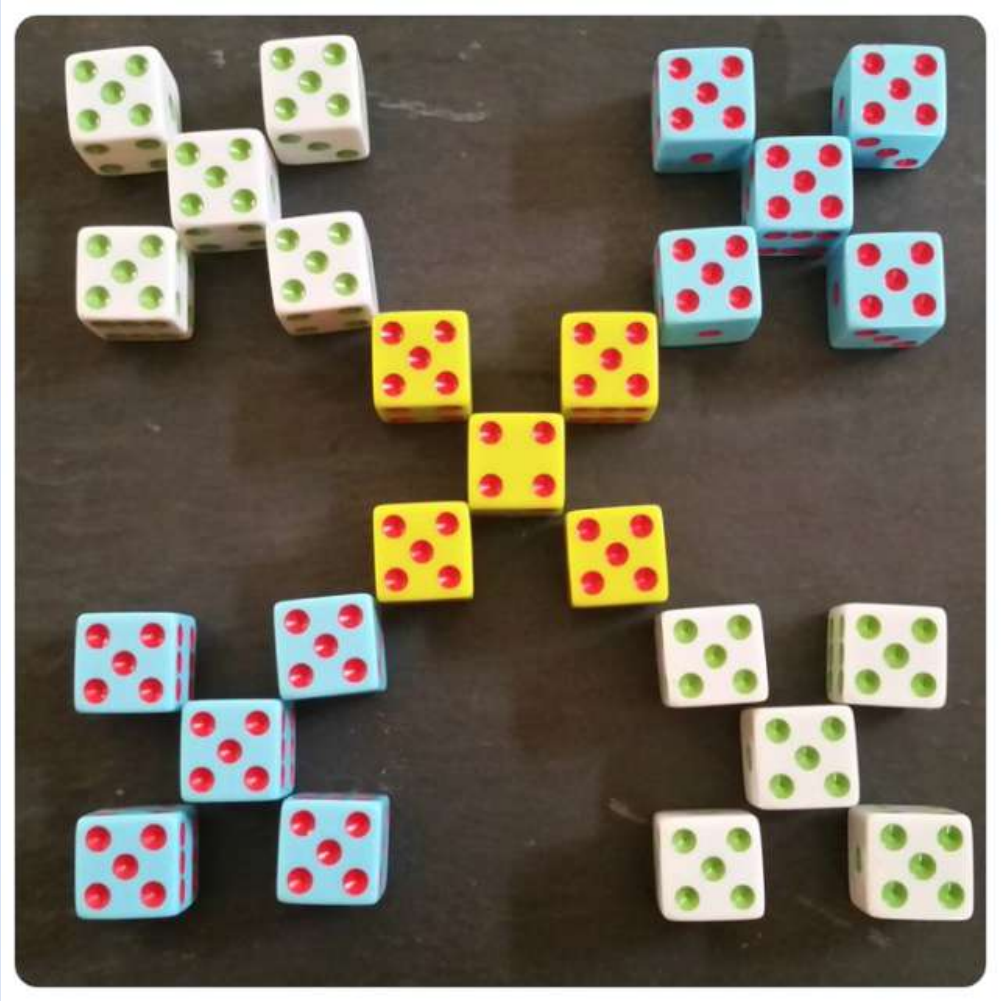
Day 26

QUICK COUNT

What did you NOTICE?

Day 26

QUICK COUNT



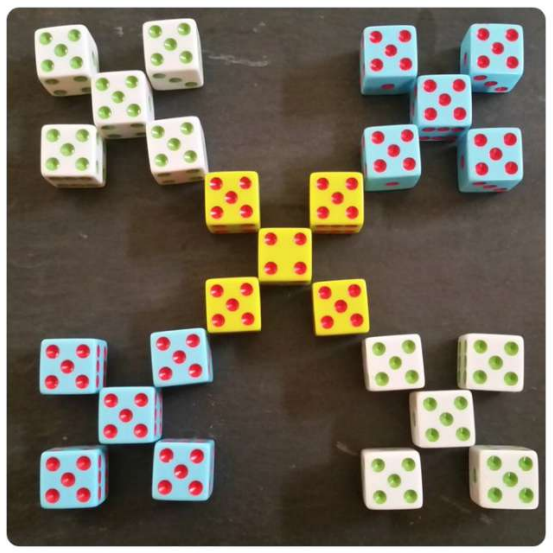
The dots on the dice are called “pips”

How many pips do you see?

What counting shortcut did you use?

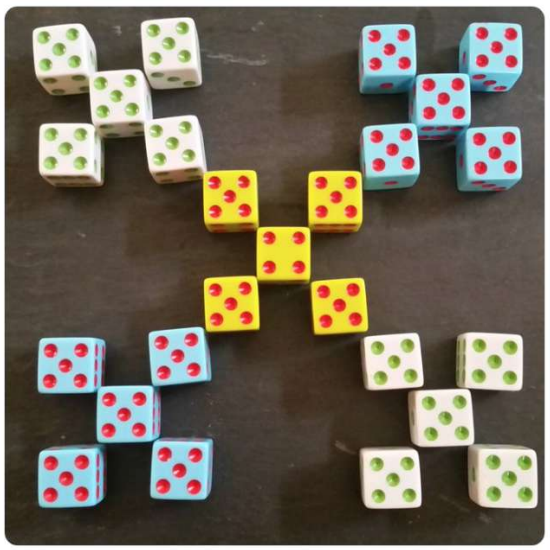
Day 26

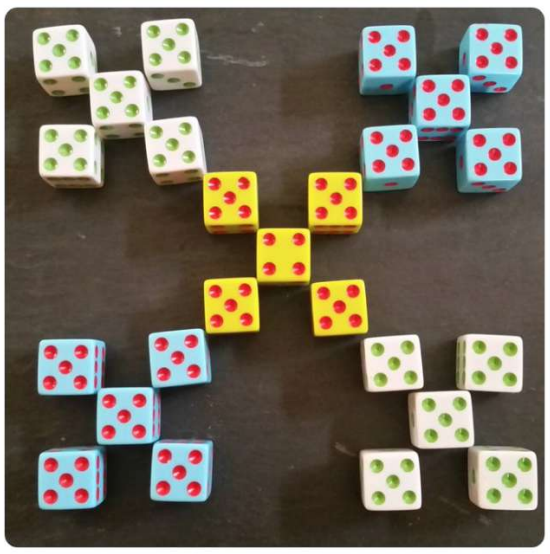
QUICK COUNT



I noticed _____ so I _____

(They) noticed _____ so they _____





Day 26

Reflect

What was mathematically important?

QUICK COUNT

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.

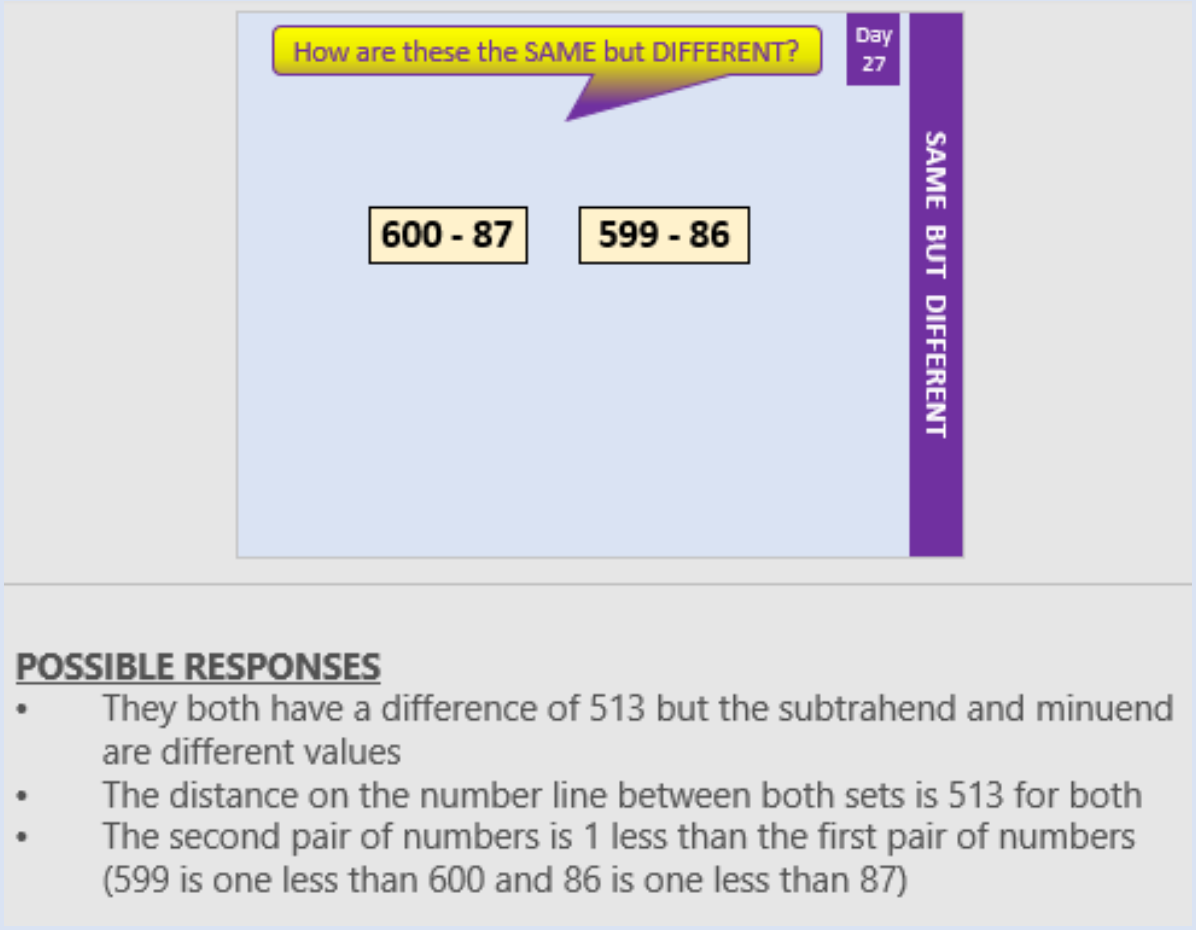
CALVERT COUNTY PUBLIC SCHOOLS

Day 27

Use the NEXT SLIDE with students.

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

- 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 BUT DIFFERENT

How are these the SAME but DIFFERENT?

Day 27

600 - 87

599 - 86

SAME BUT DIFFERENT

The total number of shapes is…

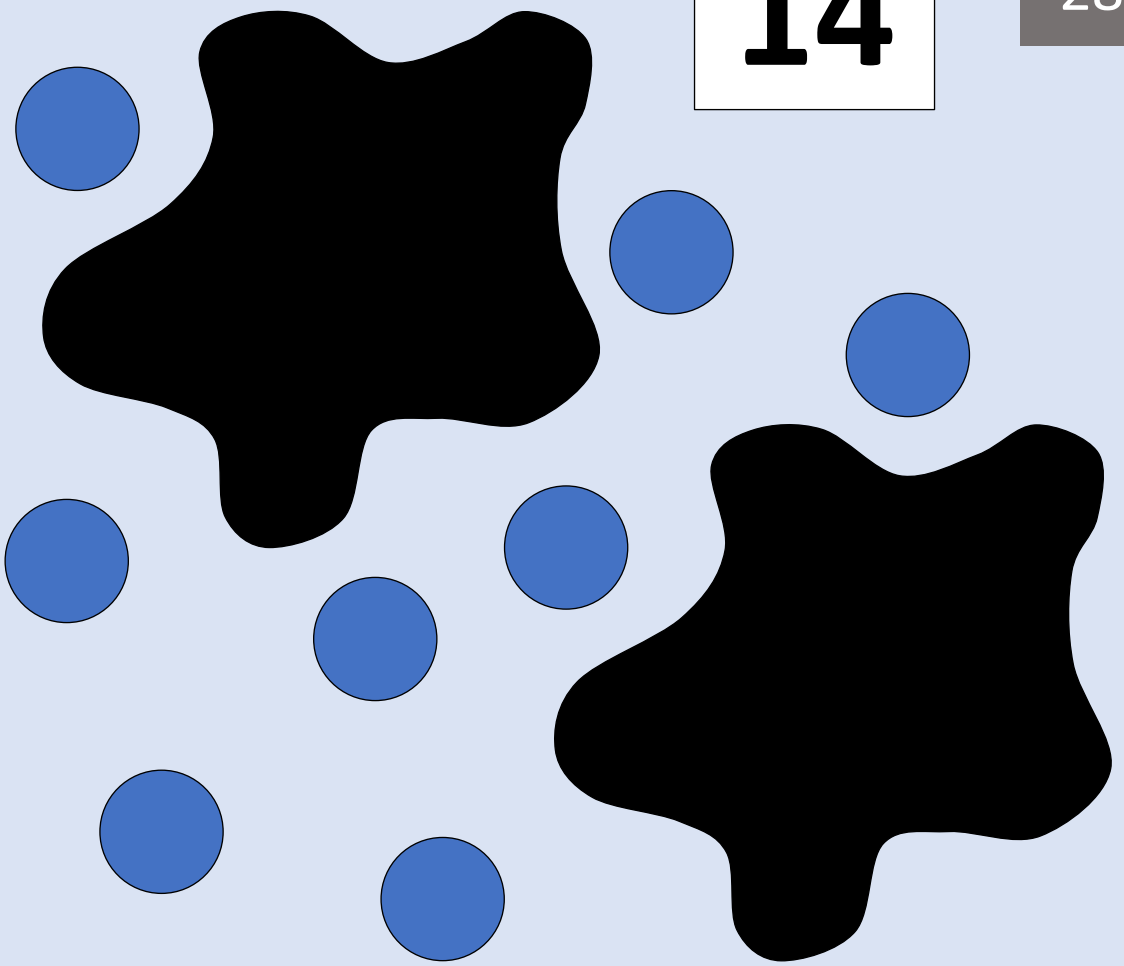
Splat!

…nder each …splat? How do you know?

…w else could you know?

…splats to see …ow many shapes are there.

W… can we learn …rom this picture?



14

Day 28

SPLAT!

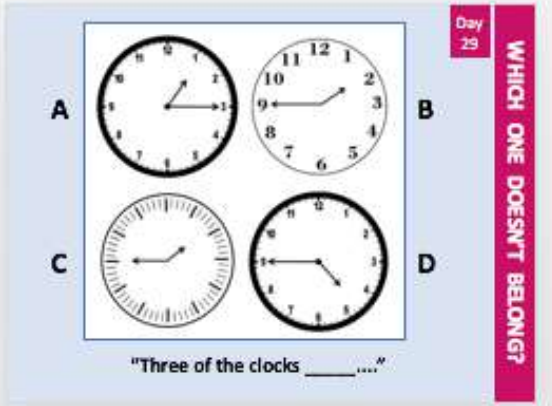
3.OA.C.7
4.R.1

Use the NEXT SLIDE with students.

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

Day 29

WHICH ONE DOESN'T BELONG?



Encourage the use of the sentence starter "Three of the _____...."

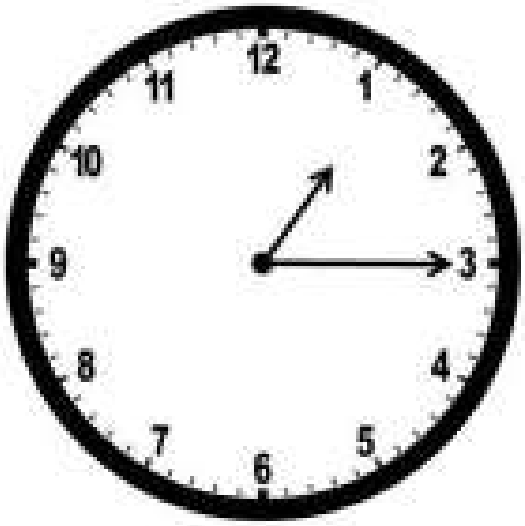
Possible Responses:

- Three of the clocks show a time that is 45 minutes past the hour. Clock A is not 45 minutes past the hour, it is 15 minutes past.
- Three of the clocks have hash marks to show the minutes. Clock B does not have hash marks showing each 1-minute time interval.
- Three of the clocks have numbers. Clock C has no numbers.
- Three of the clocks show a time that is 1:something. Clock D is not a time in the 1 o'clock hour.

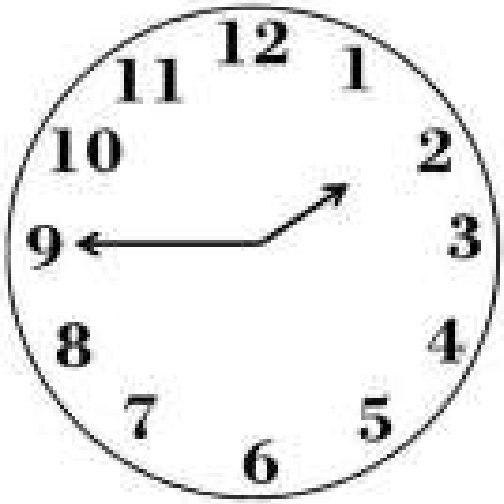
Day 29

WHICH ONE DOESN'T BELONG?

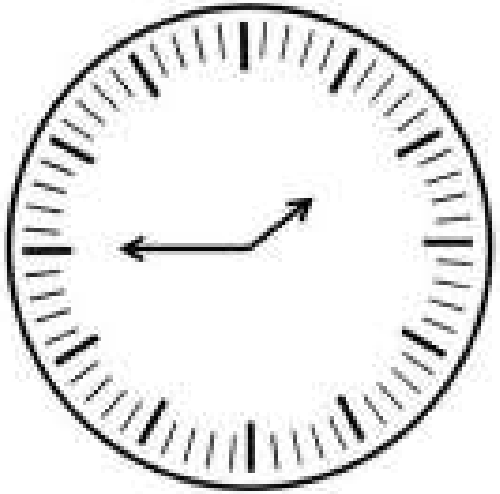
A



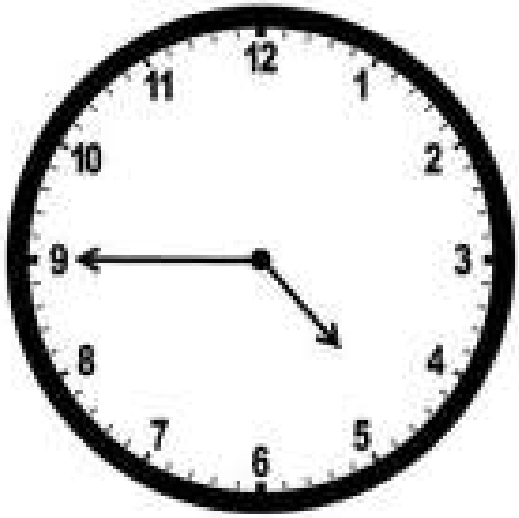
B



C



D



"Three of the clocks _____...."

2.MD.C.7

Count by 3s beginning with 342

Day 30

BEGIN WITH NUMBER: 342
COUNTING RULE: add 3
GOAL:

- Find PATTERNS within the counted numbers.
- Use those patterns to PREDICT numbers that will appear later in the counting sequence.

CHART: As students choral count, chart their responses – this will give them a visual while counting AND will prompt great discussion when finished counting. **Be sure to write the numbers aligned as shown below to make the patterns more visible.**

Ask: What patterns do you notice when you look at the numbers that we counted?

342	345	348	351	354	357	360	363	366	369
372	375	378	381	384	387	390	393	396	399
402	405	408	411						

Possible Patterns to Notice

- Each row below increases by 30 when compared to the number directly above it (why do you think that is true? Because we are counting by 3s and there are 10 numbers on each row, so 3x10=30)
- Each column ends in the same number
- Two rows have the same 100s place value
- The diagonal increases by 33 when you go down left to right. It increases by 27 when you go down right to left. (Why do you think that is true?)

****NOTE: You may not be able to write small enough on the lines provided on the next slide. It is important that numbers are charted 10 across for students to easily see the pattern; use your whiteboard or chart paper turned lengthwise if needed.**

CHORAL COUNTING

Count by 3s – starting on 342

Day 30

342 ____ ____ ____ ____ ____ ____ ____ ____ ____

____ ____ ____ ____ ____ ____ ____ ____ ____ ____

____ ____ ____ ____ ____ ____ ____ ____ ____ ____

____ ____ ____ ____ ____ ____ ____ ____ ____ ____

CHORAL COUNTING

4.OA.C.5

Day 31

Which answer is

As Close as it Gets?

ESTIMATION

Explain that NONE of the answers shown are the exact solution.

- Students should use **mathematical reasoning** to select the answer that is **closest** to the actual answer. **Discourage complex calculations, encourage estimation and reasoning.**
- Students are expected to **explain the reasoning they used** to select the answer that they think is closest to the actual answer.

Possible Reasoning: *3012 is only 12 past the benchmark value of 3000 and 2998 is only 2 in front of the benchmark value of 3000. Finding the difference between two numbers is the same as finding the DISTANCE between the two numbers. The distance between these two numbers is 14 (2 in front of 3000 then another 12 past the 3000). Of the choices given, 14 is closest to ZERO. Be sure to spend time discussing this as some students will struggle to wrap their thoughts around the idea that the closest answer can be zero (yes, zero is a real number and a valid approximation).*

Day 31

Which answer is

As Close as it Gets?

3,012 – 2,998

0	*100*	1,000	1,999

What mathematical reasoning did you use to decide on the closest answer?

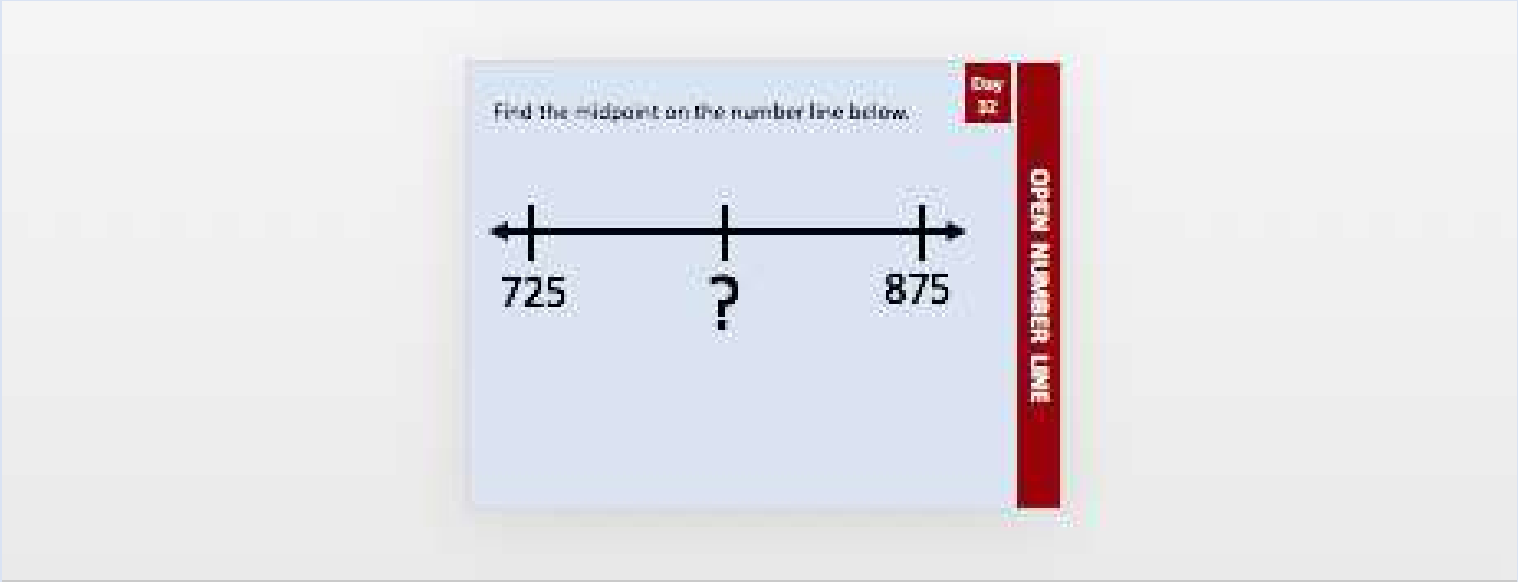
ESTIMATION

4.NBT.B.4

Day 32

Use the NEXT SLIDE with students.

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

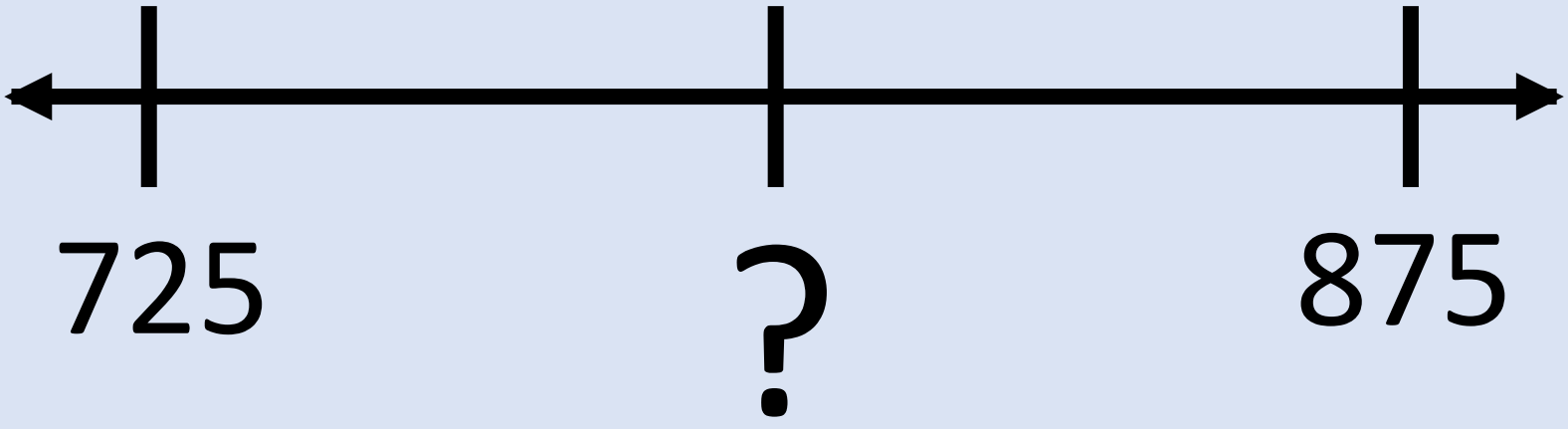


Have students find the midpoint on the number line and share their reasoning.
Example: The midpoint is 800. The difference between 875 and 725 is 150.
Half of 150 is 75, so the midpoint is 800 (725 +75 = 800 and 875 – 75 = 800).

OPEN NUMBER LINE

Day 32

Find the **midpoint** on the number line below.
Be ready to discuss the strategy you used.



OPEN NUMBER LINE

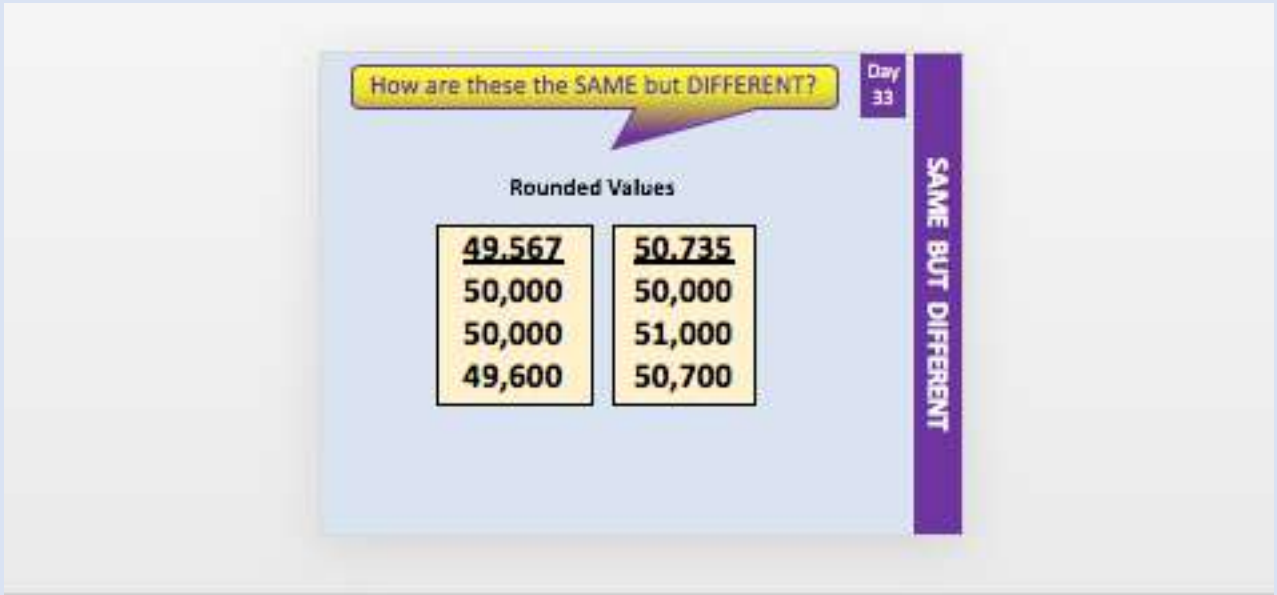
4.NBT.B.4
4.R.1

Day 33

Use the NEXT SLIDE with students.

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

- 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….”



POSSIBLE RESPONSES

- When rounded to the 10-thousands place, the values are the same
- When rounded to the 1000s place, they both have a 5 in the 10-thousand place but the thousands place is different
- When rounded to the hundreds place, 49,567 rounds UP and 50,735 rounds DOWN

SAME BUT DIFFERENT

How are these the SAME but DIFFERENT?

Day 33

SAME BUT DIFFERENT

Rounded Values

49,567
50,000
50,000
49,600

50,735
50,000
51,000
50,700

64 – 40
64 – 45
64 – 20
64 – 28

Day 34

NUMBER TALK

TEACHER NOTES

BEFORE

This slide has the String of expressions that you will use for today's Number Talk. You can use Smart Ink, right click for PowerPoint Pen, or convert this slide to Smart Notebook so you can easily annotate on the slide. The annotation is an important part of the routine. The expressions should be presented one-at-a-time with skills building on one another. Remember, students will come with a wide variety of strategies. Allow student sharing of these strategies and work toward determining which of the ways were most efficient and brain-friendly.

DURING

Decomposing to Subtract:

This Number Talk includes computation problems that encourage students to keep the first number intact and add large chunks of tens and then add the ones.

Example: 64 – 45
64 – 40 – 5
24 – 5
24 – 4 – 1
20 – 1
19
so 64 – 45 = 19 (be sure to conclude by bringing the routine full circle back to the ORIGINAL problem presented and its solution)

AFTER

After doing the Number Talk String, be sure to highlight this strategy and encourage students to "look for" places they can use it throughout the day.

Day 34

64 – 40

NUMBER TALK

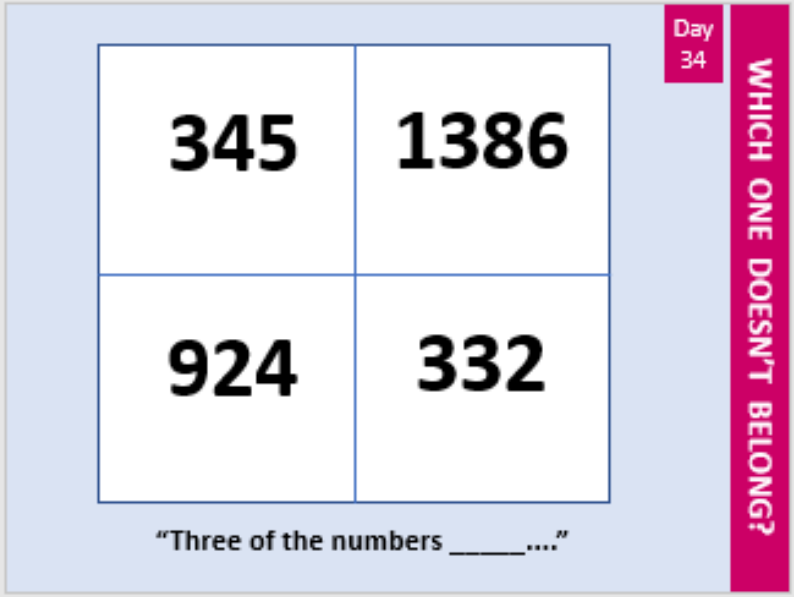
4.NBT.B.4

Use the NEXT SLIDE with students.

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

Day 35

WHICH ONE DOESN'T BELONG?



Encourage the use of the sentence starter "Three of the _____...."

Possible Responses:

- Three of the numbers are three-digit numbers. 1386 is not a three-digit number
- Three of the numbers are even numbers. 345 is not an even number, it is odd.
- Three of the numbers are multiples of 3. 332 is not a multiple of three
- Three of the numbers are contain the digit 3. 924 does not have a three as one of its digits

Day 35

WHICH ONE DOESN'T BELONG?

345	1386
924	332

"Three of the numbers _____...."

4.OA.B.4

Day 36

Using the DECIDE & DEFEND routine

- **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

DECIDE & DEFEND

Use the NEXT SLIDE with students.

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

Day 36

DECIDE & DEFEND

$3.00 x 8 = $24
$3.00 x 9 = $27

Jai has 4 people in his family. If all 4 of the members go to the museum, it will be less expensive for them to purchase the family pass if they plan to visit the museum more than TWICE since 2 visits x 4 people will cost $24. The family plan is $25.00

Day 36

Jai's family is buying tickets to the museum.
The museum sells two different types of tickets.
Which ticket plan is better for a family of four?

Museum Rate Plans:

- **Individual Passes: $3.00 per person per visit**
- **Family Plan: $25.00 for one month for unlimited visits**

Image: London Museum of Natural History

DECIDE & DEFEND

4.OA.A.2

Day 36

Reflect on Learning

- What was mathematically important in the problem?
- What new math idea did you learn today?
- Next time I plan to…

DECIDE & DEFEND

Day 37

SPLAT!

Splat!

We don't know the total number of blue shapes. We do know that because both of the splats are the same color they

What could the total be? What are some possibilities?

ssibilities

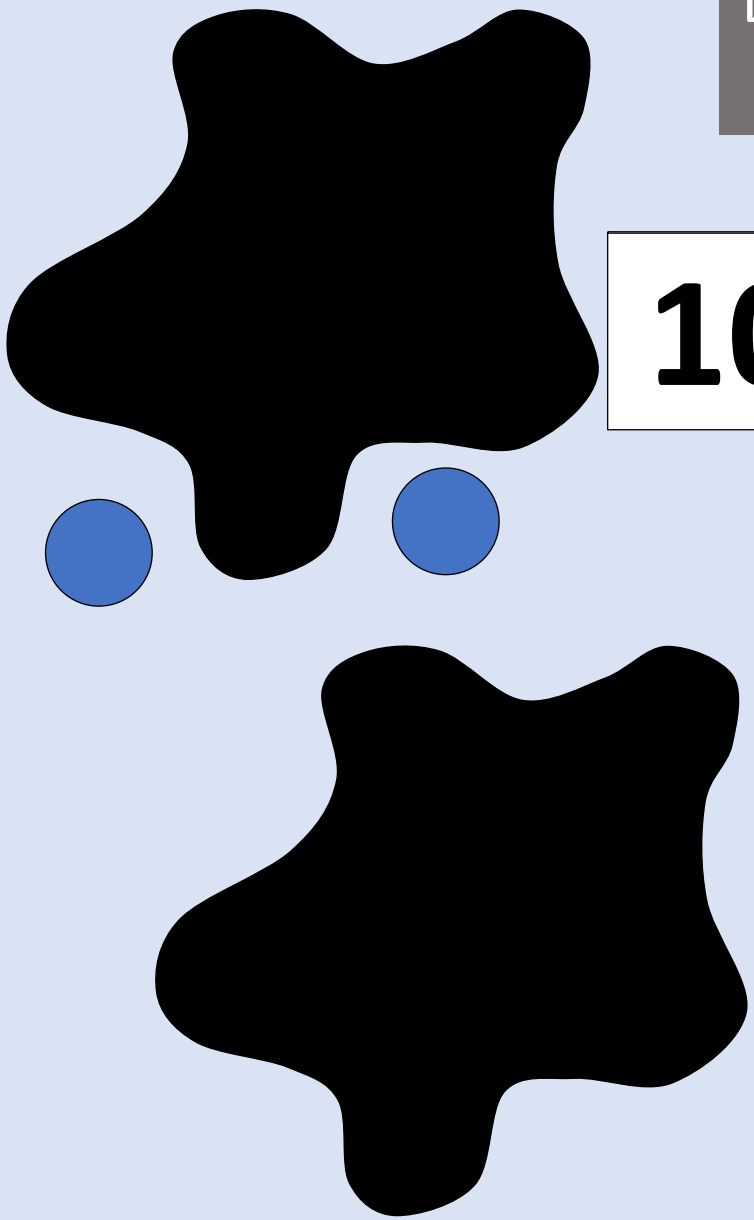
d?

How is the list of possible totals like

Let's look under

What is the total?

10



Day 38

51 – 30
51 – 35
55 – 20
55 - 26

TEACHER NOTES

BEFORE

This slide has the String of expressions that you will use for today's Number Talk. You can use Smart Ink, right click for PowerPoint Pen, or convert this slide to Smart Notebook so you can easily annotate on the slide. The annotation is an important part of the routine. The expressions should be presented one-at-a-time with skills building on one another. Remember, students will come with a wide variety of strategies. Allow student sharing of these strategies and work toward determining which of the ways were most efficient and brain-friendly.

DURING

Decomposing to Subtract:

This Number Talk includes computation problems that encourage students to keep the first number intact and add large chunks of tens and then add the ones.

Example: 51 – 35
51 – 30 – 5
21 – 5
21 – 1 – 4
20 – 4
16
so 51 – 35 = 16 (be sure to conclude by bringing the routine full circle back to the ORIGINAL problem presented and its solution)

AFTER

After doing the Number Talk String, be sure to highlight this strategy and encourage students to "look for" places they can use it throughout the day.

NUMBER TALK

Day 38

51 – 30

NUMBER TALK

4.NBT.B.4

Day 39

Esti-Mystery

Estimation Activity with clues!

NOTE: This Estimation routine contains a number chart. Have students determine which numbers should be eliminated BEFORE clicking to reveal the number chart after each clue.

Students use clues to solve the estimation mystery. After all clues are revealed, students will have enough information to determine if their initial estimate was correct.

Clues are revealed one at a time with time to discuss and refine original estimates after EACH clue is revealed. No one should be stuck with their original estimate – encourage mindful refinements.

Students may benefit from using paper and pencil to work through possibilities or consider creating a class chart where possibilities are added and crossed off as each clue is revealed.

PROTIP: Use a number chart in a dry erase sleeve for students to track the numbers that are/are not possible.

ESTIMATION

How many foam peanuts are there?

As the clues appear, use the information to narrow the possibilities to a smaller set. After each clue, use estimation again to determine which of the remaining answers is the most reasonable.

Write down your first estimate. After each clue, you'll see if your estimate is still a possibility. After each clue, if it is no longer possible write down a new estimate – and be prepared to explain why you chose it.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Clue #1

There are more than 9 pieces.
You can't see all of the pieces.

Clue #2

There are less than 16 pieces.

Clue #3

The answer is a multiple of 3.

Clue #4

The answer is not a multiple of 5.

After seeing the clues, you have narrowed the possibilities to a small set of numbers or perhaps even a specific number. Before you see the answer, select your final estimate. Write it down and explain to someone why you chose that number.

The Reveal
Click to see the answer.

Day 40

QUICK COUNT

What do you NOTICE?

4.OA.B.4
4.R.1

Day 40

QUICK COUNT

What did you NOTICE?

Day 40

QUICK COUNT

How many do you see?

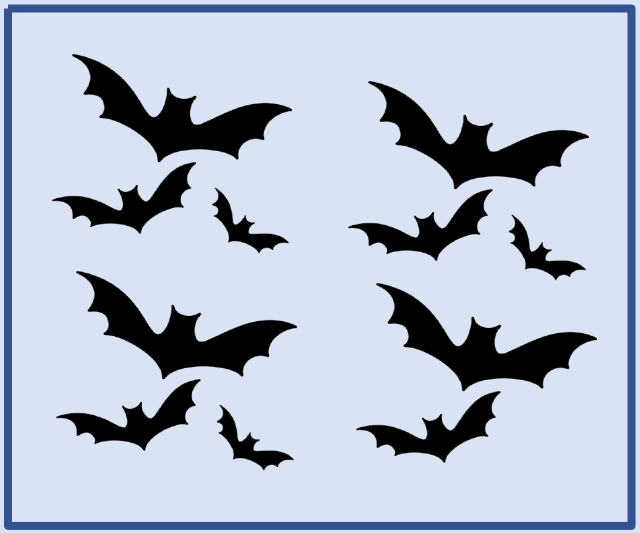
What counting shortcut did you use?

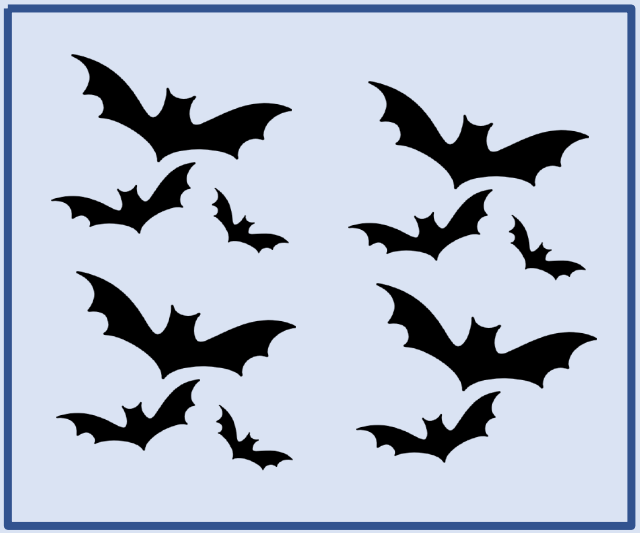
I noticed ____ so I _____

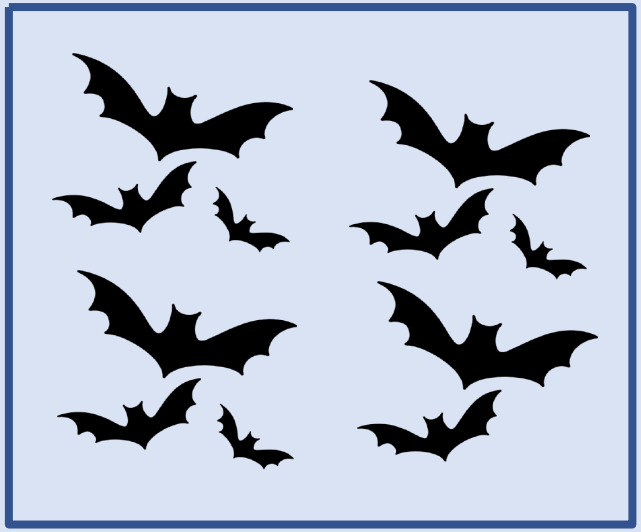
(They) noticed ____ so they___

Day 40

QUICK COUNT







Day 40

Reflect

What was mathematically important?

QUICK COUNT