

2nd Grade Mathematics Assessment and Tasks

Today's plan

- Debrief the lesson that you taught after January's workshop
- Do some number sense tasks
- Connect number sense tasks to assessment
- District time

Reflect on your lesson

- Last time..
 - You planned a lesson that you were going to teach
 - You were supposed to come back with student work.
- In small groups
 - Talk about the lesson you taught
 - How did it go?
 - What was evidence of student learning?
 - Changes for next time?

*If you didn't teach that lesson talk about a different lesson that you have taught recently.

Assessment

- Formative
- Summative
- Diagnostic

Formative Assessment

- During a lesson when do you typically notice your students are not "getting it?"
- As students are working independently what are you doing in your classroom?

Lesson Structure

- Task as a whole class (mini lesson)
- Discussion of task as a whole class
 - Utilize think-pair-share and small group time
- Small group time
 - Teacher group (instruction)
 - 2 or 3 independent or small group centers
 - Math games
 - Activity sheets
- Closure/wrap up

Stadium Sections

- There are 79 fans in one section at the baseball game at 1:30 p.m. At 1:50 p.m. there were 245 fans. How many more fans had arrived?
- At 2:05 p.m. there were 403 fans. How many more fans had arrived since 1:50 p.m.?
- If the section holds 600 seats how many seats are empty at each of the times?
- Use a picture or representation to solve this task.

Stadium Sections

- Pictures?
- Other representations?

Stadium Sections

- Was this addition or subtraction? Why?
- Describe the level of difficulty regarding the numbers considering 2nd grade students? Explain.

Three-digit subtraction work

- Tasks that require students to reorganize tens and hundreds are challenging without concrete manipulatives.
- Our class has collected 59 cereal box tops. If the goal is to collect 225 how many more do I need?
- If we added in parts would it be easier to add ones, tens, or hundreds first?

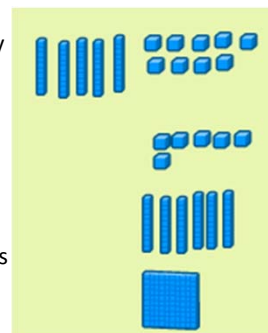
Three-digit subtraction work through the eyes of addition

- Our class has collected 59 cereal box tops. If the goal is to collect 225 how many more do I need?



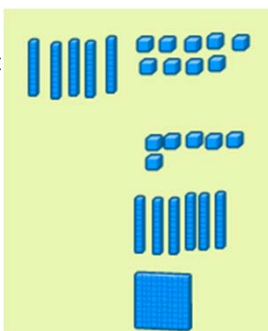
Subtraction by adding up in parts

- The student started by adding ones, then tens, then hundreds.
- When we start at 59 and add up to 225 what is the student thinking about for each of the three parts that they added?



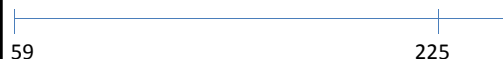
Subtraction by adding up in parts

- What if the student added a hundred first then tens then ones?
- What would the student be thinking about during each step?



Subtraction by adding up in parts

- How could I jump from 59 to 225?
- Find three different ways.
 - One of the ways must include 5 or more jumps
 - One of the ways must only include 3 jumps
 - One of the ways must include only 4 jumps



Subtraction by adding up in parts

- Ways to jump?

Subtraction by adding up in parts

- $59 + \underline{10 + 10 + 10 + 10 + 100 + 10 + 10 + 1 + 5} = 225$
- $59 + \underline{1 + 40 + 100 + 20 + 5} = 225$
- $59 + \underline{1 + 5 + 60 + 100} = 225$
- $59 + \underline{100 + 60 + 6} = 225$

Another subtraction task

- There are some 2nd graders in the district. Students either bring their lunch or get lunch in the cafeteria. There were 79 more students who brought lunch than those who got it in the cafeteria. If 237 students brought their lunch how many students got lunch in the cafeteria?

Cafeteria

- Approaches?
- Models or representations?
- Does it make sense to “add up” like we did before?

Subtraction- should we even bother with it?

- Thoughts?
- It is true- all subtraction problems can be solved by adding up from the number you subtracting (100 – 79, count on from 79 to get to 100).
- Why is subtraction fluency important still?

Why did the CCSSM authors do this?

- 1st Grade- 2 digit numbers with reorganizing tens and ones with models/pictures/representations
- 2nd Grade- 2 digit numbers with reorganizing tens and ones with and without models AND 3 digit numbers ONLY with models/pictures/representations
- 3rd Grade- 3 digit numbers with reorganizing hundreds, tens, and ones with and without models/pictures/representations

Three-digit what? We can't even do two digit work....

- What do you do?

Three-digit what? We can't even do two digit work....

- Models
 - Base ten blocks
 - Hundreds board work
 - Drawing of base ten blocks
 - Number line
- Mental math
 - Skip counting off the decade
 - Hiding games with numbers within 10

Planning

- What content do you have left to teach?
- Write a multi-step story problem
- What manipulatives or resources are needed?
- How do you expect students to solve it?
- How will you formatively assess students?
- How will you assess students' work afterwards?

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 - Planning- tasks and problems
 - PD – ppt slides