

1st 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 with Deb Jameyson

Pulse Check

- What are your students doing well in regards to math?
- What are some struggles that your students are having?

Assessment

- 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

- Diagnostic
- Formative
- Summative

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

Cookies on the Counter

- There are 8 cookies on the counter. How many more cookies do you need so that 10 people can have cookies?
- Use counters to model/act out the task.

Cookies on the Counter

- There are 5 cookies on the counter. How many more cookies do you need so that 10 people can have cookies?
- Use counters to model/act out the task.

Cookies on the Counter

- There are 3 cookies on the counter. How many more cookies do you need so that 10 people can have cookies?
- Use counters to model/act out the task.

Cookies on the Counter

- Is the same strategy the most efficient for each problem?

$$8 + \underline{\quad} = 10$$

$$5 + \underline{\quad} = 10$$

$$3 + \underline{\quad} = 10$$

Cookies on the Counter

- What is the Grade 1 expectation for this type of work?
- 1.OA.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

Jumping Around

- Bridget has a hundreds board and is playing a game with Steve. Bridget says- "I start at a number less than 40 that has the same number of tens and ones." What numbers could Bridget be on?
- Bridget says, "I then moved down 3 rows."
- Bridget says, "I then moved to the right 2 numbers."
- Bridget says, "I then moved down 2 rows and to the right 5."
- What numbers did Bridget land on?

Jumping Around

- Steve has a hundreds board and is playing a game with Bridget. Steve says- "I start at a number greater than 70 that has the same number of tens and ones." What numbers could Steve be on?
- Bridget says, "I then moved up 3 rows."
- Bridget says, "I then moved to the left 2 numbers."
- Bridget says, "I then moved up 4 rows and to the left 3."
- What numbers did Bridget land on?

Problem Types

- Change Unknown- Put Together
- Change Unknown- Take Apart
- Compare Bigger Unknown, Version with More
- Compare Smaller Unknown, Version with fewer

Jumping Around

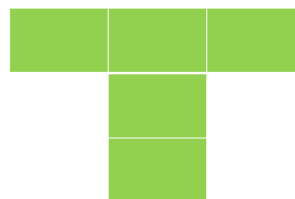
- What are some equations that go with our stories?

Close to 15

- Using the following cards find combinations of 3 cards that you can add up to get exactly 15. You must use 3 cards in every equation. You can only use a number once.

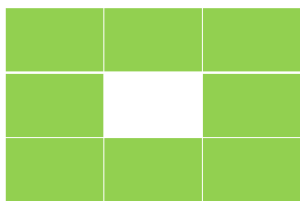
5	8	8	3	6
8	4	4	7	6
2	5	6	2	1

Equal Sums



- Use the numbers 1-5. Put one number in each green box so that the sum of the 3 boxes on the top equals the sum of the 3 boxes going down.
- Once you have solved it try it with the numbers 6-10.

Equal Sums



Use the numbers 1-8. Put one number in each green box so that the sums equal the same amount.

Why did the CCSSM authors do this?

- Kindergarten- representing 2 digit numbers, $15 = 10 + 5$ or a group of 10 with 5 leftovers
- 1st Grade- subtracting 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

Two digit subtraction work? We can't even do one 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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