Common Core Mathematics Standards: Grade 1

Goals

- Explore some mathematical tasks
- Unpack the Standards
- Consider how we teach some of the "big ideas" in our grade

Checking Our Pulse

- How has the year gone so far in math?
- How are your students doing?
- Topics of concern?

Today's Number

- Today's number is 12
- Write down some "pictures" of 12
- Write a pair of numbers that you can put together to make 12.
  - After you find one pair find another pair.
- Use 3 addends to find 12.

Today's Number

- What is the benefit of these types of activities?
- How do your students do with these types of activities?
- Write a "today's number" activity for your classroom.
- You need to include at least 3 different parts
- Include 3-4 follow up questions that you can ask.

Number Sense…

- What do those two words mean to you ?
- What concepts do your students struggle with?
- How has the Common Core influenced what "number sense" means compared to before?

Developmental Progression

- Take a look at the concepts on this sheet
- In small groups (2-3 people)
  - What is the progression of these concepts?
  - What grade are these introduced?
- In your grade what are you responsible for?
- For each – what makes this concept difficult for some students?

Developmental Progression

- Answers…
- Surprises?

Watch the box!

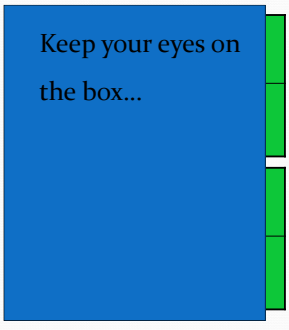
How many dots do you see?

Watch the box!

Keep your eyes on the box…

Watch the box!

Keep your eyes on the box…



Watch the box!

How many dots did you see?

Ten and "some more"

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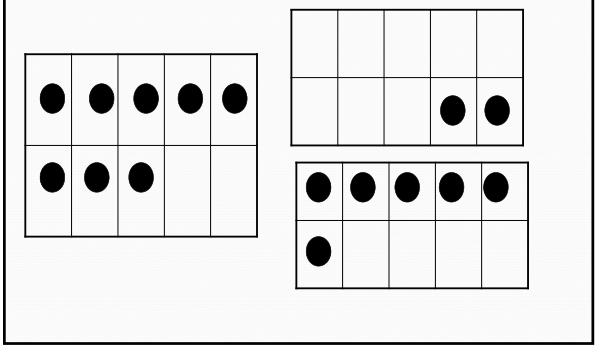
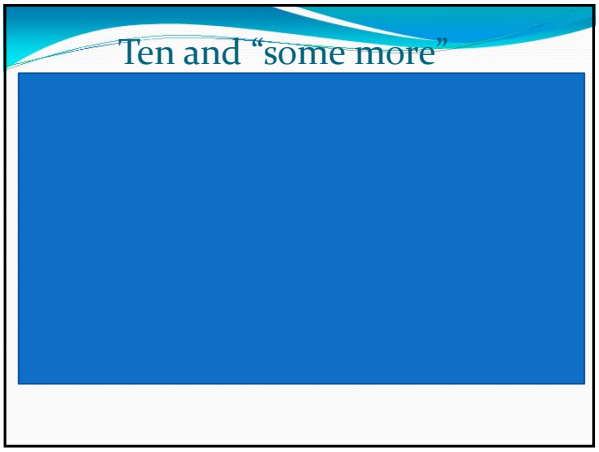


Ten and "some more"



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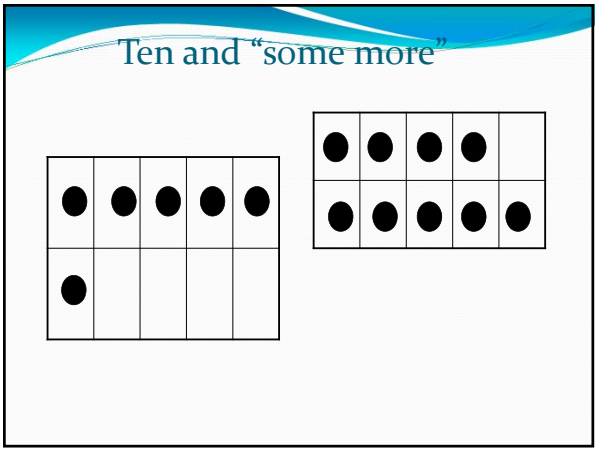

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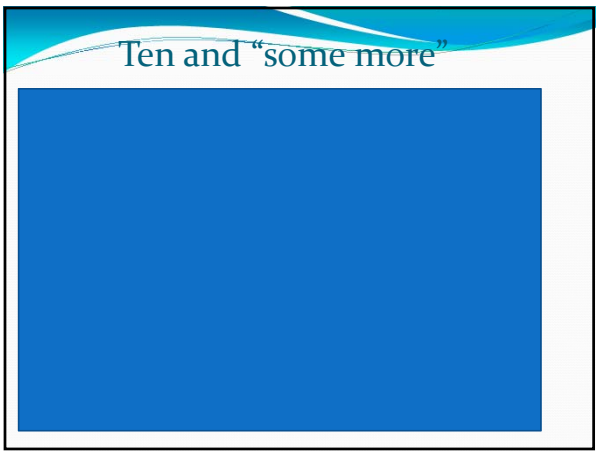

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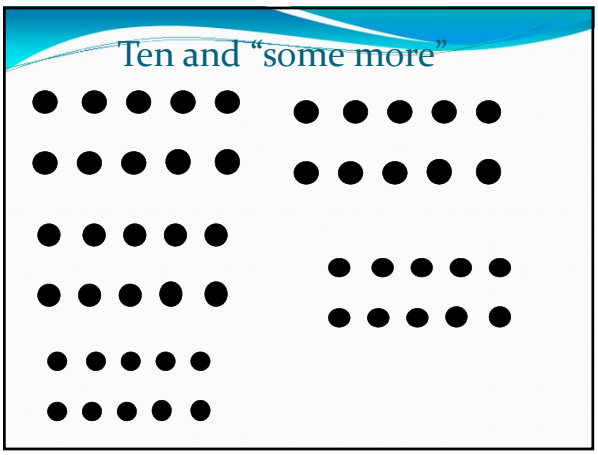
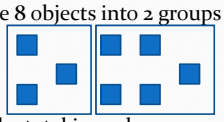


Activity Exploration

- Focal questions
- What are the mathematical ideas students work with?
- Where may students need support with these activities?

Pictures of 8

- Arrange 8 objects on paper
- Trace or draw them (we would want students to trace)
- Split the 8 objects into 2 groups and circle each group



- Write the total in each group
- Write an addition phrase/equation
  - 3 joined with 5 equals 8, 3+5 = 8, 3 and 5 more is the same as 8

Pictures of 8

- What other materials can you use?
- Where is the rigor?
- How can you differentiate this activity?

Red or yellow

- Make a table with columns: Red, yellow, total
- Grab 10 counters.
- Drop them on your paper.
- If you end up with 8 red and 2 yellow…
  - 8 in the red column, 2 in the yellow column
- What goes in the total column?

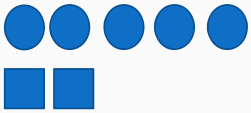
Cave Game

- Start with 9
- Put some in the cave.
- Ask – "how many are hiding in the cave?"

Task analysis…

- For each task solve it
- Use an equation and one other representation when you solve it

Nancy	Juan
9	1
8	2
7	3
6	4
5	5
4	6
3	7
2	8
1	9



Task Sort Table

- Complete the table

Task Sort

- What do you notice about all/most of the tasks?
- Difficult tasks?
- Easy tasks?
- What makes a task difficult/easy?
- Algebra??? Really… where ?

Math Games

- What is the purpose of playing games in math?

Make 10

- Get 5 number cards each.
- You have a match when you have 2 cards that have a sum of 10.
- If you don't have matches you can ask your classmate or draw from the pile. After 3 attempts to make a match you lose your turn.

Get 2

- Get 5 number cards each.
- You have a match when you have 2 cards that have a difference of 2.
- If you don't have matches you can ask your classmate or draw from the pile. After 3 attempts to make a match you lose your turn.

Close to 15

- Turn over 5 number cards. Pick 3 of them to get a sum that is close to 15 as possible.
- Students should build each number and the sum with cubes (ten frames would help)
- Want to keep score?
  - Students' score is their distance from 15.
  - Keep playing and keep track of your score.

Addition Compare

- Pull 2 cards and find your sum
- Model each sum with cubes
- The largest sum gets both cards
- Play a few rounds

Ten Plus

- Make columns on your paper:

less than 10, 10, 11, 12, 13, 14, 15, 16, 17, 18

- Draw Two Number Cards and build them with cubes on your Ten Frame
- If your sum is greater than 10 rewrite the equation as 10 + __.
- For example if your number cards are 7+5 you would write 10+2 in your 12 column.

- 5+ 8 = 13 = 10+3
- 5 + 8 = 10 + 3

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