A Collaborative 3 Act Task

Title: The Very Hungry Caterpillars

link: https://mscastillosmath.wordpress.com/2016/09/18/3-act-the-very-hungry-caterpillars/

Big Idea: Numbers represent quantities that can be decomposed into smaller parts
Curricular Competencies:
estimating reasonably
developing mental math strategies and abilities to make sense of quantities
visualizing to explore mathematical concepts
model mathematics in contextualized experiences
Content: number concepts beyond 10, composing and decomposing numbers, determine the missing part of a total

Learning Target: I can represent my math thinking in pictures, numbers and words.

ACT ONE:

Establishing a Need to Know**:** share the 30 second clip of still pictures from a garden.

Invite students to investigate the clip for math. Record student observations in a two column chart using the frame "What did you notice? What do you wonder?"

Driving Question: How many caterpillars were black?

Estimating:
Estimating: Invite students to consider the driving question and then help establish a range by offering both a two low estimate and a too high estimate.
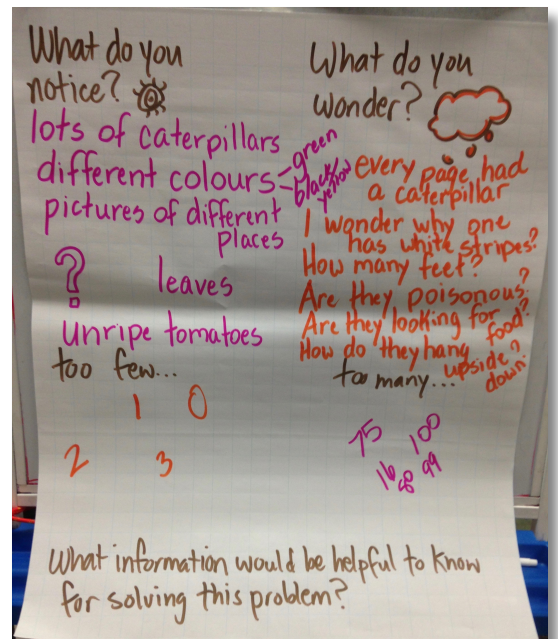
ACT TWO:

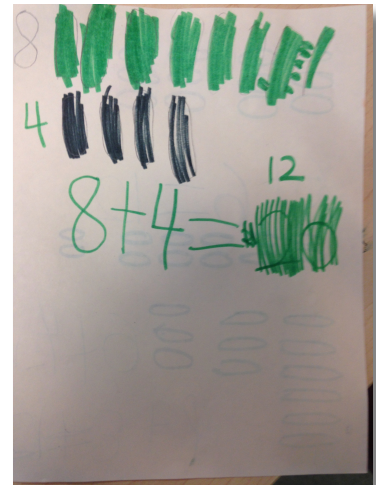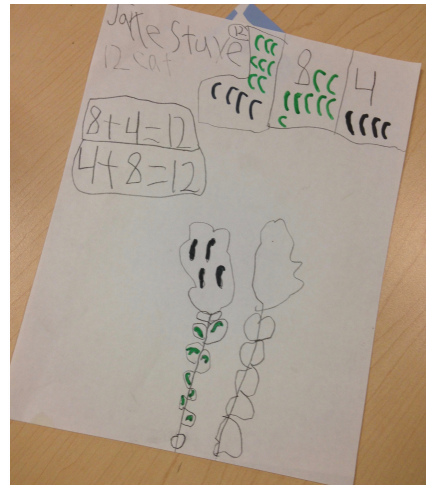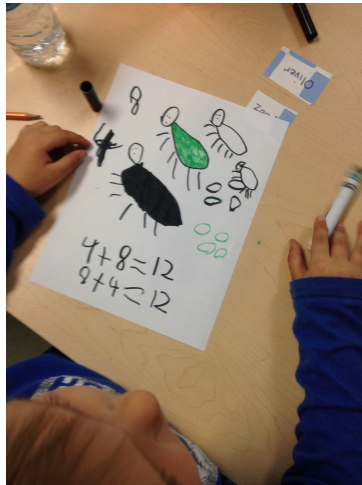12 Caterpillars were in my garden

8 were green

The rest are black

What information would be helpful to know for solving this problem?
How many caterpillars were in the garden?

Students will work at tables to find a solution, representing their thinking in pictures numbers and words.

ACT THREE: share the photograph that reveals the solution.

Reflection:

Strengths: What worked (What strategies did you use to work toward a solution)?

Stretches: What was difficult?

Next steps: What would you do differently next time?

Extension:

Explore the math concepts in Ten Little Caterpillars by Bill Martin

Explore ordinal and play with the doubles and the ten dots in the text (i.e. wings of the butterfly)