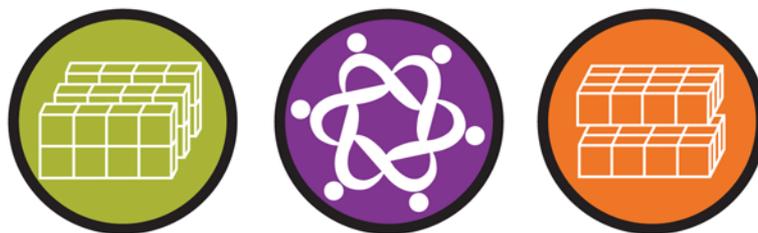


Welcome to ...



(CO)²MP Elementary

Common Core for Mathematical Proficiency in Elementary Schools

(CO)²MP Elementary



BGSU
Bowling Green State University

Ohio | Department
of Education

Agenda

- Number Talk
- Connecting Arithmetic to Algebra
- Sums of Consecutive Numbers
- Sums of Odd Numbers – Student Videos
- Lunch
- Bake Sale Tasks
- Algebraic Habits of Mind
- Reflection



NUMBER TALKS

(CO)²MP Elementary



BGSU
Bowling Green State University

Ohio | Department
of Education

12 X 18

(CO)²MP Elementary



BGSU
Bowling Green State University

Ohio | Department
of Education

$$68 \div 17$$

Connecting Arithmetic to Algebra

“There are various ways we come to believe in the truth of a mathematical statement, depending on the context and on our background and experiences. In mathematics, among students and adults, four different approaches to justifying a general claim are typical: 1) Accepting the claim on authority, 2) Trying it out with examples, 3) Applying mathematical reasoning based on a visual representation or story context, 4) Proving using algebraic notation and the laws of arithmetic.”

- Russell, Shifter, Bastable (2011)



Connecting Arithmetic to Algebra

Read page 52 to the top of page 56.

As you are reading, highlight, underline, or make note of things you find significant or meaningful.

When your group is finished, take some time to discuss these things you highlighted, underlined, or made a note of.



Connecting Arithmetic to Algebra

- **Focus Question #1 (pg. 66)**

The first section of Chapter 5 describes four approaches to justifying a general claim.

- Reflect on your past work as a math learner. Which of these approaches did you experience?
- Which approaches are new for you to consider?
- What are the implications for your own instruction?



Sums of Consecutive Numbers

In our work with Dr. Brahier, we determined that the sum of four consecutive whole numbers is always even.

- What can you say about the sum of three consecutive whole numbers?
- Can you justify your response?



Sums of Odd Numbers

Student Videos

Allison

Mike



Lunch

(CO)²MP Elementary



BGSU
Bowling Green State University

Ohio | Department
of Education

Bake Sale Task

- Solve the task individually in any many ways as you possibly can
- Share your strategy with a partner
- Discuss your solutions in small group
- Whole group sharing and discussion.



Algebraic Habits of Mind

- Read through the “Algebraic Habits of Mind” page with a partner.
- Look at the features of the different habits of mind.
- Which of these lines of thought seem familiar to you?
- Can you think of things you have seen your students do that indicate they are engaging in these lines of thought?

Time of Reflection

Take a few moments to reflect on our time of thinking and learning today.

- Jot down the meaningful and significant things you thought about.
- Jot down the ways you thought mathematically and pedagogically.
- Jot down how you contributed to our shared community of professionals.

Stay Safe

- Please help us put the room in proper order.
- Please leave your name tags for next time.

