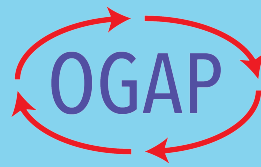


Addition and Subtraction in the Common Core

What does the CCSSM expect in Grades K-3 related to addition and subtraction?

What is meant by fluency?



- “Fast and accurate”
- Similar to fluency in a foreign language—”flow”
- Fluent is not halting, stumbling or reversing oneself-no significant hesitation
- Used judiciously in the CCSSM to mark the endpoints of progressions of learning that begin with conceptual understanding
- Some are meant to be mental and some paper/pencil

Strategies vs. Algorithms

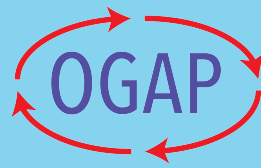
Strategies

- Based on place value, properties of operations, and relationship between addition/subtraction
- Relational thinking
- Conceptual understanding

Algorithms

- A procedure or set of efficient steps for solving a problem
- Efficient, accurate and generalizable for all whole numbers and decimals

Examine these Common Core domains for each grade level:



- Operations and Algebraic Thinking (OA)
- Number and Operations in Base Ten (NBT)

Grade	K	1	2	3
Fluent within...				
Addition and Subtraction within...				
Strategies and Algorithms				

Discuss...

- What did you notice? Did anything surprise you?
- What patterns did you see?
- What are the implications for your instruction?