

Understanding the Major Work of the K–2 Grade Band

This full-day, six-hour session develops participants' understanding of fundamental mathematics. The session showcases the coherence of addition and subtraction as participants explore the development of those operations across the K–2 grade band.

Participants are invited to study Problem Sets, analyze teaching sequences, deliver lesson segments, practice fluency activities, and model with mathematics. The use of linking cubes, number bonds, 5-group drawings, the Rekenrek, place value charts, Hide Zero cards, tape diagrams, and unit language supports participants in making connections that help them develop students' understanding of addition and subtraction with whole numbers.

Participants can expect to deepen their understanding of

- the big idea of the *unit* and unit language.
- the four components of the Number Core and their relationship to addition and subtraction.
- three levels of problem solving for addition and subtraction.
- the make ten addition and take from ten subtraction strategies and their prerequisite skills.
- concrete and pictorial representations that build conceptual understanding of addition and subtraction.
- the progression of strategies for composition and decomposition and their relationship to place value.
- physical and written representations of the standard algorithms for addition and subtraction.
- how repeated addition and arrays create the foundation for multiplication and division.