

Mental Math and Number Talks

What is a Number Talk?



- Purposeful conversation about numbers and operations: *Addition, Subtraction, Multiplication, Division*
- Helps students develop confidence in working flexibly with numbers: *how to manipulate them (take them apart and put them back together) to aid in mental computations*
- Way to explore relationships between numbers: *encouraging deeper conceptual understanding and true number sense*

Why Mental Math and Number Talks?

“Children who struggle to commit basic facts to memory often believe that there are “hundreds” to be memorized because they have little or no understanding of the relationships among them.”

Fosnot & Dolk. (2001). *Young Mathematicians at Work: Constructing Multiplication and Division*



- Mental math is not only part of our curriculum, it is an important life skill
- Helps students build confidence by sharing their own methods, making meaning of numbers
- Encourages kids to *know* their facts, not just memorize them, and how to apply what they know to help solve other problems
- Builds critical thinking skills by encouraging students to choose efficient math strategies
- Sharing their thinking helps students practice oral communication skills

Supporting Students at Home



- Build strong, positive attitudes about math
- Encourage perseverance
- Ask open questions that require explanation, rather than yes/no or one word answers

Additional Resources:

Jo Boaler - youcubed.org

(Fluency Without Fear; Visual Math Improves Math Performance; Speed and Time Pressure Blocks Working Memory)