

Addition & Subtraction: Beyond the standard algorithm

KCM Conference

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Presented by the Northern Kentucky MaRTI Plus Cohort

Rebecca Arnett
Stephanie Borders
Courtney Bray
Traci Branstutter
Jennifer Bryngleson
Andrew Calland
Shari Cook
Angela England
Kim Laughlin

Georgie Richman
Charlotte Smith
Sherry Sparks
Vicki Tekouk
Mary Wehmeyer

*For more information, contact the cohort
facilitator Cindy Aossey at
cindy.aossey@outlook.com*

100 or Bust (TpT)/ Target 10 (Fundamentals-Red level): *Using place value and addition of either 1-9 or 1-6 to hit a target number.*

Count Down (Fundamentals-Purple level): *Subtract multiples of 10 from two & three digit numbers. Presenters will model how to play this game with manipulatives found in every classroom.*

Addition and Subtraction to 100 (Developing Number Knowledge) *The purpose of these activities is to increase development of mental computation skills in students by adding and subtracting in the range of numbers from 1 to 100. Through application of a variety of mental strategies used to add and subtract, student will become proficient in mental computations (beyond use of the standard algorithm). The three games we will present are “70 plus game”, “How many more to make 100?” and “32 Minus” games.*

Number Talks – *Minilessons using number strings to develop students’ thinking.*

Bead racks – *From subitizing & screening to problem solving using the 5-10 structure and doubles (pairs). This is a teaching tool AND a student manipulative.*

Delivery Game (KNP T5523.2 & T5523.5): *Add and subtract using strategies based on place value.*

Reflection

Three things I've learned:

1.

2.

3.

Two Things I plan to implement are:

1.

2.

References:

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Parrish, S. (2010). *Number talks: Helping children build mental math and computation strategies, grades K-5*. Sausalito, CA: Math Solutions.

Tickle, B., & Burnett, J. (2005). *Fundamentals: Games for developing and practising mental computation strategies*. Brisbane: Origo Education. <http://www.origoeducation.com/fundamentals/>

Wright, R., & Collins, D. (2012). *Developing number knowledge assessment, teaching & intervention with 7-11-year-olds*. London: SAGE.

Kentucky Numeracy Project Intervention Guide: knp.kentuckymathematics.org