Lesson Plan for KNP Activity
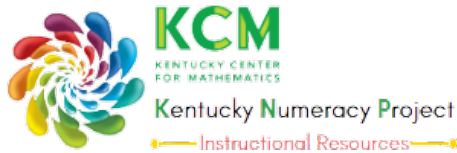# T 5525.2: Three in a Line - add&sub with materials

Teacher Planning Notes:

Task Group Number: 5525	**Task Group Name:** Three in a Line
Strand: Base Ten Arithmetical Strategies	**Activity Level and Color:** 2 Blue

KNP Activity Link with access to Printables and Student Instructions:
/knp/activity.php?id=5525.2&prefix=T

Numeracy Target: Solve 2-digit +/- with materials by using strategies based on place value
[Numeracy Targets Chart](#)

Fluency Benchmark: KY.2.NBT.5 Fluently add and subtract within 100.

Kentucky Academic Standard(s): [KY.1.NBT.4](#), [KY.2.NBT.5](#)

Student-Friendly Learning Target: I am learning to use base-ten materials to help me add and subtract one and two-digit numbers in the range 1-100.

Suggested Student Grouping(s): pairs/small group

Materials: Game Boards A through G (1 per player) and corresponding spinners, number cubes labeled as indicated on game boards, base -ten materials such as bundles and sticks, 10 frame cards, 100 bead rack and/or a 100 bead string, counters/covers

Activity Description: Students play "3 in a line" in pairs or a small group. Each student begins with Game Board A (see print link). NOTE: NUMBER CUBE LABELS are shown in the lower right hand corner of each game board. Students take turns. On a student's turn, the student will roll the cubes, determine the sum or difference (as indicated by the roll) and cover that number on his or her board. Students are encouraged to use a base-ten manipulative such as bundles and sticks, 10 frames or a 10 row bead rack to work out the problem or as a "check" to verify a predicted answer. The first player with 3 in a line (any direction) wins. Allow students to skip the "building" step if they are confident and can explain what would happen with the materials. The student should cover only one instance of a number each turn. If a number is not available, the student loses a turn. After students are confident with Game A, they repeat the process with Game B and so on. Variation: Students may play in pairs on a single game board using different color counters. The first student with 3 covers of his/her color in a line wins the game.

Teacher Notes: The Game Boards should be played in order, starting with Game Board A. It is recommended that all game boards be laminated then written on with a dry-erase or vis-àÂ -vis marker.

Evidence of Learning (Diagnostic Assessment of Progress): Place out 4 bundles and 3 loose sticks and ask "how many?" After student answers, cover the sticks (e.g. with paper or cloth). Place 1 bundle and 3 sticks next to the cover and ask " How many in all?" (If needed, clarify "in all" includes what's under the cover.) After student answers, slide sticks under the cover. Then, place 6 sticks next to the cover (roughly placed in two groups of 3) and ask "Now how many in all?" After student answers, slide sticks under and say "Imagine I take 12 away. What would be left?" (Covered tasks presented are: 43 + 13, 56+6, 62-12)