

Lesson Plan for KNP Activity

T 5525.5: Three in a Line - add&sub within 1000

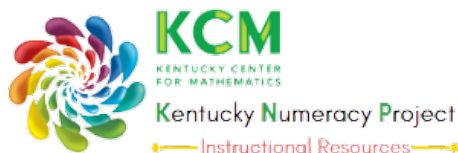
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| Teacher Planning Notes: | |
| Task Group Number: 5525 | Task Group Name: Three in a Line |
| Strand: Base Ten Arithmetical Strategies | Activity Level and Color: 5 Pink |
| KNP Activity Link with access to Printables and Student Instructions: /knp/activity.php?id=5525.5&prefix=T | |
| Numeracy Target: Solve 3-digit +/- without materials using a variety of strategies Numeracy Targets Chart | |
| Fluency Benchmark: KY.3.NBT.2 Fluently add and subtract within 1000. | |
| Kentucky Academic Standard(s): KY.3.NBT.2 | |
| Student-Friendly Learning Target: I am learning to add and subtract within 1000. | |
| Suggested Student Grouping(s): pairs/small group | |
| Materials: Game boards A through H (1 per player) and corresponding spinners, number cubes labeled as indicated on game boards, base-ten materials such as 10 frame cards, bundles and sticks, 100 bead racks and/or a 100 bead strings, counters/covers, 1 recording sheet per player (optional) | |

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 and determine the sum or difference (as indicated by the roll). The student must explain his/her answer and reasoning to the other players. The student may find it helpful to show his/her thinking on an Empty Number Line. If the other players agree, the student will cover that number on his or her board. Initially, students may find it helpful to use a base-ten material (see teacher notes) to solve and/or show thinking. The first player with 3 in a line (any direction) wins. 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. Variations: (1) The students may be asked to use the recording sheets (see print link) to record their thinking on their first 6 rolls. (2) A student that identifies a mistake in another student's solution earns an extra roll. (3) 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. Look for evidence that students are seeing that a "hundred" is the unit formed by 10 "tens". Mini ten frames are included in the printables for this activity. There are "hundred sheets" (i.e. 10 filled ten frames), filled 10 frames and empty 10 frames. It is recommended that all frames be laminated. Students use a dry-erase marker to draw dots for ones on the empty frames as needed. Similarly, dots can be crossed off a filled frame (to show 9). If using bundles and sticks, build "super bundles" out of 10 regular bundles. It is recommended that all game boards be laminated then written on with a dry-erase or vis-à-vis marker.

Evidence of Learning (Diagnostic Assessment of Progress): Ask student to solve the following tasks. Tasks can be presented verbally or may be written horizontally: $50-12$, $39+15$, $67-29$. After each task, ask student to explain thinking. Look for explanations that indicate student is using chunks.

KNP ID #T 5525.5



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