

Lesson Plan for KNP Activity

T 5525.4: Three in a Line - make 20, 60 or 100

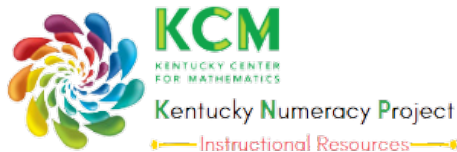
Teacher Planning Notes:	
Task Group Number: 5525	Task Group Name: Three in a Line
Strand: Base Ten Arithmetical Strategies	Activity Level and Color: 4 Purple
KNP Activity Link with access to Printables and Student Instructions: /knp/activity.php?id=5525.4&prefix=T	
Numeracy Target: Solve 2-digit +/- without materials using a range of strategies Numeracy Targets Chart	
Fluency Benchmark: KY.2.NBT.5 Fluently add and subtract within 100.	
Kentucky Academic Standard(s): KY.2.NBT.5	
Student-Friendly Learning Target: I am learning to find the missing addend to make 20, 60 or 100.	
Suggested Student Grouping(s): pairs/small group	
Materials: Game Boards A through E (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, 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 cube, determine what goes with the number rolled to make 20. The student must explain his/her answer and reasoning to the other players. If the other players agree, the student will cover that number on his or her board. Students may settle disputes using a base-ten manipulative such as bundles and sticks, 10 frames or a 10 row bead rack but this should happen only occasionally. 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 (make 60), Game C (make 100) and Game D (make 100). 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: Unlike others in this task group, Games A, B and C can be played in any order. Students should play C before playing D. 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 "What goes with 8 to make 20?" Ask student to explain thinking and write an equation that matches (i.e. $8+12 = 20$ or $20-8 = 12$). Repeat the process, asking "What goes with 35 to make 60?" and "What goes with 49 to make 100?"

KNP ID #T 5525.4



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