

Lesson Plan for KNP Activity

A 3304.4: Fill 20 Game (find the difference)

Teacher Planning Notes:

Task Group Number: 3304

Task Group Name: Fill 20/30 Game

Strand: Addition and Subtraction

Activity Level and Color: 4 Purple

KNP Activity Link with access to Printables and Student Instructions:

</knp/activity.php?id=3304.4&prefix=A>

Numeracy Target: Relate addition and subtraction

[Numeracy Targets Chart](#)

Fluency Benchmark: KY.2.OA.2 Fluently add and subtract within 20.

Kentucky Academic Standard(s): [KY.1.OA.3](#), [KY.1.OA.4](#), [KY.2.OA.2](#)

Student-Friendly Learning Target: I am learning to subtract within 20 using the more efficient counting strategy.

Suggested Student Grouping(s): teacher partner small group

Materials:

"Fill 20" game board, 20 counters per player, 1 cube labeled "10, 10, 11, 12, 13, 14" and another labeled "10, 11, 12, 13, 14, 14"

Activity Description:

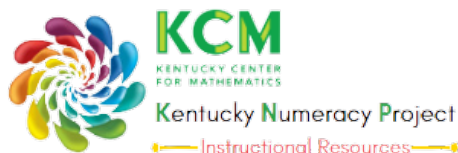
Each student uses one "Fill 20" game board. During a turn, the student rolls both cubes and finds the difference. This is the number of counters added to the game board. Ex., if 11 and 14 are rolled, the difference is 3, so 3 counters are added to the game board. Game ends when game board(s) are filled. Students might be asked to record the subtraction sentence for each turn.

Teacher Notes:

The reason both cubes are in the range 10 to 14 is to generate problems where the difference will be no more than 4. It is hoped that students will realize that it is easier to count the difference or use related known facts rather than counting back the amount being removed. For example, if a student rolls a 11 and 13, it is hoped that they will not start at 13 and count back 11 counts. Rather, the student could reason "Removing 1 is 12 and removing 2 is 11, so it's 2" or "Since 3-1 is 2 then 13-11 is 2". If a student is struggling to see these strategies, the student may find it helpful to work the problem on a 20 bead rack.

Evidence of Learning (Diagnostic Assessment of Progress):

Pose the following tasks one at a time by writing the task on a card or white board. Observe if the student is using an efficient strategy. 15-3, 14-12 and 13-10.

KNP ID #A 3304.4

www.kymath.org
kcm@nku.edu