## Lesson Plan for KNP Activity M 4448.1: Tiling and Counting

**Teacher Planning Notes:** Task Group Number: 4448 Task Group Name: Tiling Rectangles Strand: Multiplication and Division Activity Level and Color: 1 Red KNP Activity Link with access to Printables and Student Instructions: /knp/activity.php?id=4448.1&prefix=M Numeracy Target: Build and share items into equal groups Numeracy Targets Chart Fluency Benchmark: KY.3.OA.7 Fluently multiply and divide within 100. Kentucky Academic Standard(s): <u>KY.2.OA.4</u>, <u>KY.3.MD.5</u> Student-Friendly Learning Target: I am learning to make rows on a rectangle and write the addition sentence. Suggested Student Grouping(s): partners Materials: Rectangle Cards; 100 Color Tiles of 2 Colors (50 of Each Color); 1-6 Number Cube Activity Description: Print and cut apart rectangles available through print link. Be sure to print the pages at "actual size" so that a 1 inch tile fits exactly in the gridlines. For game play, the teacher or a student will choose a rectangle. Players will take turns filling the rectangle by (1) rolling a cube and (2) adding that many tiles to the rectangle. Students should place tiles so that rows are of alternating colors. After the rectangle is completely filled, students will write a matching addition sentence with equals addends. Players should then remove all tiles, rotate the rectangle one guarter turn, and repeat the process. **Teacher Notes:** During discussion, observe if students are attending to the array structure of the

**Teacher Notes:** During discussion, observe if students are attending to the array structure of the tiles. Bring out vocabulary such as "row", "equal rows", "array", "area" and "covering". If targeting standard KY 2.OA.4, limit size of rectangles to 5 by 5.

**Evidence of Learning (Diagnostic Assessment of Progress):** Place a 4 by 5 rectangle with gridlines in front of student. Ask student to tile the rectangle with 1 inch tiles so that the rows alternate in color. Ask student to determine the total number of tiles and write a matching addition sentence.



KNP ID #M 4448.1

www.kymath.org kcm@nku.edu