KNP ID # M 4449.3, GreenFluency Benchmark: KY.3.OA.7Task Group: Bead ArraysKentucky Academic Standard(s): KY.3.OA.1, KY.3.OA.7Numeracy Target: Count items arranged in equal groups with only group markers visible
(items with groups are not visible)

Bead Arrays (Partial)

I am learning to determine the number of beads in an array without seeing all of the beads and write a matching multiplication equation.

Materials:

100 bead rack (10 rows of 10) per player, 1 cube with labels {2 rows of, 3 rows of, 4 rows of, 5 rows of, 6 rows of, 7 rows of} and another cube with labels $\{2, 3, 4, 4, 5, 5\}$, writing space or 1 recording sheet per person

Directions:

1. On your turn, roll the "rows of" cube. Push over the first bead for that many rows. (For example, if you roll "4 rows of", push over the first bead of 4 rows.)

2. Roll the other cube. Imagine what your array would like if you had that many beads in each row. Determine the total number of beads in your imaginary array and write the matching multiplication sentence.

3. Make your array and check your answer.

4. After everyone has made an array, determine who has the array with the most beads. The player with the most beads is the winner for the round and gets a point. In case of a tie, both (or all) players get a point.

5. The first player to earn 5 points wins.

* dice labels may vary



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