**Science and Technology- Counting By Sample Area Activity**

**Today we will estimate the population size of grasshoppers, (lentils) on our St. Thomas field, (grid paper).**

**Materials:**

* 1 piece of grid paper
* 1 pen or pencil
* 1 teaspoon (5 mL) of green lentils  
  \*Each individual lentil represents one grasshopper in the field.
* 1 calculator

**Procedure (Your teacher must initial and approve your procedure before you start):**

1. Measure 1 teaspoon (5 mL) of lentils and scatter them as evenly as possible over the entire paper. Make sure some lentils gets in each box on the page.

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TABLE: Population Sampling Chart

|  |  |  |  |
| --- | --- | --- | --- |
| Number of pieces of pasta in Quadrant 1 | Number of pieces of pasta in Quadrant 2 | Number of pieces of pasta in Quadrant 3 | Average number of pieces of pasta |
|  |  |  |  |

Calculations:

Questions:

1. Count the actual number of lentils. How close was your estimated number of pieces to the actual number?

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2.What type of distribution does the grasshopper population exhibit? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. In real life, would you use this method to estimate a grasshopper population? Why or why not?

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