



Random Sampling

The grid represents a habitat measuring 10 miles on each side. Each grid segment is 1 mile x 1 mile. Each black circle represents a sage grouse.

1. Randomly remove one slip from each container. Write down the number-letter combination and find the grid segment that matches the combination. Count the number of sage grouse in that grid segment and record the number on the data table.
2. Return each slip to its appropriate container.
3. Repeat Steps 1 and 2 until you have data for 10 different grid segments and the table is filled out. These 10 grid segments represent a sample. Gathering data from a randomly selected sample of a larger area is called sampling.
4. Find the total number of sage grouse for the 10 segment sample. This is an estimation based on a formula. Add all the grid segment grouse together and divide by ten to get an AVERAGE number of sage grouse per grid segment. Record this number in the table. Multiply the average number of sage grouse by 100 (this is the total number of grid segments) to find the total number of grouse in the meadow based on your sample. Record this number in your data table.
5. Now count all the sage grouse actually shown in the habitat. Record this number in the data table. Divide this figure by 100 to calculate the average number of sage grouse per grid.

1	2	3	4	5	6
7	8	9	10		
A	B	C	D	E	F
G	H	I	J		
1	2	3	4	5	6
7	8	9	10		
A	B	C	D	E	F
G	H	I	J		