Directions:

Get your supplies – a bag of beads and a cup.

Count out 10 color and 10 white beads and put them into the cup – record these numbers as the “parent generation”:

🡨 Make this chart on your own piece of paper!

|  |  |  |
| --- | --- | --- |
|  | # of color beads | # of white beads |
| Parent Generation | 10 | 10 |
| 1st generation |  |  |
| 2nd generation |  |  |
| 3rd generation |  |  |
| 4th generation |  |  |
| 5th generation |  |  |

From this parent generation, randomly select 20 beads, selecting them one at a time **and placing each bead back into the cup** after recording the color. Record the total number of color and white beads you selected as the 1st generation.

Empty out the cup and add to it the number of color and white squares you recorded for the 1st generation. The cup is now the 1st offspring generation. From this cup you will randomly select 20 new beads to determine the 2nd generation.

Repeat this process to get the 2nd generation, 3rd generation and so on. Then answer the following questions:

*How did your population change over time?*

*Explain why your population changed this way while another population may have changed differently.*