

Name \_\_\_\_\_ Period \_\_\_\_\_ Date Due \_\_\_\_\_

### Randomness Test Worksheet

You will be testing the randomness of the random number generator at <http://www.allmathwords.org/en/r/randomness.html>.

Instructions:

1. In the true random number generator, type 1 for Min and 100 for Max. This will cause the random number generator to create numbers between 1 and 100.
2. Click the Generate button. Write down the number that appears in the column labeled 'Number' on page 2 of this worksheet.
3. Repeat the step 2 until you have written down 100 numbers.
4. For each of the numbers you have written down, write 'O' for odd or 'E' for even in the column labeled 'Odd/Even'.
5. In the column labeled 'Changed', for each of the numbers after the first, write 'Y' if the oddness of the previous number is different from the oddness of the current number. Write 'N' if the oddness of the previous number is the same as the oddness of the current number.
6. Write down the number of even numbers and the number of odd numbers. Calculate and write down the percentage of each.
7. Write down the number of times the evenness changed and the number of times it remained the same. Calculate and write down the percentage of each.
8. The percentages should all be close to 50%. With only 100 numbers to compare, it is likely that the percentage is between 45% and 55%.

Total number of even numbers: \_\_\_\_\_

Total number of odd numbers: \_\_\_\_\_

Percent of even numbers: \_\_\_\_\_

Percent of odd numbers: \_\_\_\_\_

Total number of times the evenness changed: \_\_\_\_\_

Total number of times the evenness did not change: \_\_\_\_\_

Percent of the time the evenness changed: \_\_\_\_\_

Percent of the time the evenness did not change: \_\_\_\_\_

