Name _____ Class _____ Date _____

ENRICHMENT ACTIVITY 1-3

A Piece of Pi

Pi has been computed to hundreds of thousands of decimal places. One of the questions mathematicians have asked is whether each of the digits 0 to 9 appears the same number of times. These are the first one hundred decimal digits of pi in groups of ten.

1415926535	8979323846	2643383279	5028841971	6939937510
5820974944	5923078164	0628620899	8628034825	3421170679

1. Count how many times each digit appears.

0 _____ 1 _____ 2 _____ 3 _____ 4 _____

5 _____ 6 _____ 7 _____ 8 _____ 9 _____

2. Does each digit appear about the same number of times? If not, which digits appear most often?

_____

_____

The second one hundred digits are given below.

8214808651	3282306647	0938446095	5058223172	5359408128
4811174502	8410270193	8521105559	6446229489	5493038196

3. Count how many times each digit appears in the second group.

0 _____ 1 _____ 2 _____ 3 _____ 4 _____

5 _____ 6 _____ 7 _____ 8 _____ 9 _____

4. What did you observe in the second group of digits? _____

_____

5. Combine the results for the two groups of digits.

0 _____ 1 _____ 2 _____ 3 _____ 4 _____

5 _____ 6 _____ 7 _____ 8 _____ 9 _____

6. Describe your observations and conclusions. _____

_____

If you wish to continue the research, the decimal expansion of pi can be found in books and on the Internet.