Introduction to Googology

2010 Mathematics Subject Classification. Primary Key words and phrases. Googology, Mathematics

Abstract.

Contents

CHAPTER 1

The Beginning of Googology

1.1. The Simplest Unary Operation

- 1.1.1. The Positive Integers and The Sucessor numbers. The set of positive integers, \mathbb{N}^* , is defined as satisfying the following conditions:
 - (1) For any aribitrary positive integer a, its successor, a^+ is a positive integer as well.
 - (2) There exists a positive integer such that no positive integer's successor is that integer. Notate this as 1.
 - (3) Except for 1, every positive integer is the successor of a positive integer.