Do Math – Sets and Natural Numbers
English summary

To define a collection of objects, we have to use a non subjective rule method or criterion.
Classification is a way to group objects, using a rule method.

Set, in mathematics, is a collection of object. Set is a primitive concept.
The objects in a set are called **elements** of the set.
To be part of a set, objects must be clearly defined. It must be possible to know, whether or not, a given element is part of the set.
To denote, or name a **set,** we use **capital letters**. To refer to an **element,** we use **lowercase letter**.
Two or more sets are **equal** if they contain the same elements.

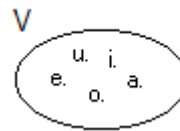There are three main ways of describing a set and to specifying his elements:

by **Set-builder notation**. Writing in braces the common properties of the elements of the set or the rule method to describe the set.	*V= {x/x is a vocal}*
by **Extension**. That is the elements list of the set. The elements are enclosed into braces.	*V= {a; e; i; o; u}*
Graphically, using **Venn Diagrams**.	

If an element is a member of a given, set we use the symbol ∈ (it is member of).
To denote that an element is not member of a given set we use the symbol ∉ (it is not member of).
The **null** or **empty set**, which contains no elements, is denoted by the symbol ∅ or by a pair of empty brackets.

The number of element of a set is named **cardinality**. If two or more sets are equal they have the same cardinality.

Subsets are elements of a collection, contained in a set. The relationship of one set that is a subset of another, is called **inclusion** or **strict inclusion** (proper subsets). We use the term **improper inclusion** for the empty set and if set and subset coincide.

In mathematics counting numbers are members of the **natural numbers** set. We use the capital letter **N** to refer to this set. Zero is member of N. Natural numbers set is infinite and ordered.
Every natural number *n* has a natural number successor (n+1) and a predecessor (n-1).

We can represent natural numbers, by placing them at equal distances on a horizontal line.

The natural numbers set N has two subsets: **even numbers** and **odd numbers**.
Even numbers end with 0, 2, 4, 6, and 8. Odd numbers end with 1, 3, 5, 7, and 9.