

The History and Future of Numbers

Evolution of numbers from Stones to Symbols to (future) Sounds/ Symbols/ Words

Numbers evolve, not only animals do. The *use* of numbers has evolved in the past 150 years. In Darwin's time, numbers were used for *counting, measuring* and *calculating*. Now numbers are also used as *names*. The number-name of a telephone is 91897197. The number-name of a bank account is 82306091006. The number-name of a car is XL11673. It is discouraging to forget a name. Children would like to remember number-names easily. They would like it to be fun. When they remember numbers, they feel that they master them. **For future children, we are developing number symbols and number words. They are easy to use and remember and useful also for counting, measuring and calculating.**

Some historical aspects of number evolution

Roman calculi (widespread about year 0): Calculi are small stones in place-value positions on a counting board.

Arabic numerals (evolutionary appearance about year 1000-1300): Abstract symbols in place-value positions on paper.

"Audio numerals, Sound numbers, Pseudonums" (evolutionary appearance about year 2000-2100): Phonetic symbols in place-value positions on paper and in words.

During Forskningsdagene, we will show how ancient Romans added or multiplied large numbers without symbols, using only calculi on a counting board or beads on an abacus. We will also explain the ten *audio numerals* and *sound numbers* that we are developing for the future, and how futurists might remember your own personal telephone number as a *pseudonum*, a silly word phrase.

The ten audio numerals are: iS=0, iT=1, iN=2, iM=3, iR=4, iL=5, iJ=6, iK=7, iF=8, iP=9. To continue from 10-30, the sound numbers are: iTiS, iTiT, iTiN, iTiM, iTiR, iTiL, iTiJ, iTiK, iTiF, iTiP, iNiS, iNiT, iNiN, iNiM, iNiR, iNiL, iNiJ, iNiK, iNiF, iNiP, iMiS. Knowing the ten number symbols and words, you could easily continue writing sound numbers (where the symbols are the same as the words) to a million (iTisiSisiSisiS) or as far as you want.

The word pSeuDoNuM is the number iSiTiNiM or 0123. AuDio NuMeRaLS is a pseudonum for iTiNiMiRiLiS or 123450. ThiS SwiSs SeeS uS is a pseudonum for iTiSiSiSiSiSiS or one million. Another example is A DiSeaSe SieZeS uS. Note that in pseudonums, it is sounds, not letters that represent numbers. Z=S, D=T, B=P, Q=K, sH & cH=J, Ss=S. Double letters that make only a single sound are a single number. Vowel sounds have no number value. Pseudonums are fun, in any language.

Let us do a **↓ FLasH eKSPeRiMeNT ↓** with numbers you give us
(check that pseudonum FLasH EKSPeRiMeNT, because it has all ten digits)

Let us show you how Romans solved an arithmetic problem with their calaculi.

Let us show you how future children will have fun with an arithmetic problem using pseudonums.

Let us make a pseudonum for your mobile phone number, in English or Norwegian.

Your mobile number: _____