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Words.

Consortium 107, 9-14 (2014).

From the text: When people think about mathematics they probably first think of numbers and not words. But mathematics, with its great intellectual curiosity for ideas, studies words from many points of view – doing what it often does, looking for patterns. In fact, the “science” of patterns is sometimes offered as a succinct definition for the subject matter of mathematics as a whole. Here I will take a brief look at some of the ways mathematics has looked at words in the hope of exploiting the resulting ideas.

Classification: K20 P20 F60

Keywords: patterns; words; strings; Fibonacci numbers; Fibonacci sequence; recursion; difference equations; generating strings from prior strings; concatenation; multiplication; Champernowne word; limits; square patterns; cubes; subwords; genetics; manipulation of strings; algorithms; combinatorics of words; Fibonacci word; Prouhet-Thue-Morse sequence; history of mathematics; counting; combinatorics; finite words; one-way infinite words; binary representations; square-free words; overlaps; combinatorics on words