The Fibonacci sequence is a sequence of numbers in which each number is the sum of the two preceding ones, usually starting with 0 and 1. It is named after Leonardo Fibonacci, who introduced it to the Western world in his book Liber Abaci in 1202. The sequence begins as follows:

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597, 2584, 4181, 6765, 10946, 17711, ... (sequence A000045 in the OEIS)

The Fibonacci sequence appears in many different places in mathematics and science, from number theory and combinatorics to geometry, botany, and computer science. It is a classic example of a recursive sequence, where each term is defined as a function of the two preceding terms. The sequence also appears in many natural phenomena, such as the branching of trees, the arrangement of leaves on a stem, and the spiral patterns in sunflower seeds. The ratio of two consecutive terms in the Fibonacci sequence converges to the golden ratio, a number that has fascinated mathematicians for centuries due to its mathematical properties and its appearance in art and architecture. The Fibonacci sequence is a fundamental concept in mathematics, with applications in many different fields, from finance to computer science. It is a beautiful example of the interconnectedness of mathematics and the natural world.