Our Worldviews Chapter 1

The **Influence** feature presents information about an individual or a group that had a major influence on the society of the time.



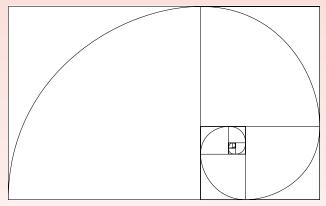
INFLUENCE

Leonardo Pisano Fibonacci

Leonardo Pisano Fibonacci (1170–1250) was born in Pisa, Italy, but was raised and educated in North Africa, surrounded by the scholarly Islamic world. He travelled the then-known world with his father, who was a merchant. Fibonacci saw great advantages in the mathematical systems used in the Islamic world compared to the Roman numeral system used in Europe. His first book described the Hindu-Arabic place-value system and the use of Arabic numerals.

His book was of particular interest to merchants because it contained many mathematical problems about buying and selling items. These problems showed how to calculate profits from sales and how to convert between the various currencies used in the Mediterranean area at the time. His text also acted as a guide for the lending and borrowing of money. The introduction of Arabic numerals made calculations much easier for merchants.

Fibonacci lived in the Middle Ages, but he influenced both the Renaissance world and the modern world with his mathematical discoveries. Fibonacci is a good example of how an individual can influence the world by encountering knowledge held by others, taking it, and building new ideas from it.



Architects use this sequence of spirals and rectangles in their buildings, as it is considered pleasing to the human eye.

1, 2, 3, 5, 8, 13, 21, ...

The Fibonacci sequence is a series of numbers in which each number is the sum of the two numbers before it. What would be the next number in the sequence as shown here? In the diagram, each section of the spiral grows according to the sequence. This spiral represents many situations in nature. The spirals in seashells match up to this sequence. Seedheads of sunflowers and other flowers follow the same spiral pattern. So, too, do pine cones.