Abstract:
A mathematician named Leonardo of Pisa noticed a pattern that occurred in nature and noticed it appeared everywhere. This widely known sequence is called the Fibonacci sequence.

Introduction:
• Fibonacci was taught mostly in North Africa
• Fibonacci noticed a pattern in the commerce in each country.
• He noticed that the Hindu-Arabic decimal system was far superior than the Roman system.

The Formation:
• Write out each sequence and add one term from the next.
  \[ F_2 = F_1 + F_0 \]  or \[ F_3 = F_1 + F_2 \]
  \[ F_3 = 1 + 2 \]  or \[ F_4 = F_2 + F_3 \]
• Now we can rewrite this sequence into an equation.
  \[ F_1 = F_2 = 1, \]
  \[ F_n = F_{n-2} + F_{n-1} \text{ for } n \geq 3. \]
• Albert Girard was the mathematician behind modern day notation.

Perfection:
• The Greeks referred this number to the golden ratio.
• This ratio \( \phi = \frac{1}{2} (1 + \sqrt{5}) \) has been used in many fields.

Emergence:
• Fibonacci proposed the following about a group of rabbits given certain conditions.
• During a successive number of times, we see this sequence with these rabbits.

Resources: