BLOCKHEAD THE LIFE OF FIBONACCI

GRADES 1-4

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Story Summary

As a young boy in medieval Italy, Leonardo Fibonacci thought about numbers day and night. He was such a daydreamer that people called him a blockhead. When he grew up and traveled the world, he was inspired by the numbers used in different countries, especially the Hindu-Arabic numerals he learned about in Africa. He realized that many things seemed to follow a certain pattern and made a discovery that came to be known as the Fibonacci Sequence. Today he is famous for his simple word problem about multiplying rabbits and is now considered one of the greatest Western mathematicians of all times. This is the story of this man who was certainly not a blockhead.

Objectives

- 1. To develop an understanding of number sequences.
- 2. To encourage acceptance of individuals who are "different."
- 3. To develop an understanding of Roman numerals.

Before viewing the video

Tell the children they will meet Joseph D'Agnese, the book's author, in this video. This is about a boy named Leonardo Fibonacci who made discoveries about numbers that are useful today. Identify Pisa, Italy, on a map and explain that Fibonacci lived there in the twelfth century. In this video you will see the story of a boy who was called "Blockhead" because he was a dreamer who was different from the other students. You will see that it can be a very good thing to be different!

Questions to ask after viewing the video

- 1. How do the illustrations let you know that this story took place a very long time ago?
- 2. When he was a boy in school, what did Fibonacci use to help him count his numbers?
- 3. Why did Fibonacci have so much time to daydream in school?
- 4. Why did Maestro (the teacher) get angry at Fibonacci?
- 5. Why did Fibonacci's father take him to Africa?
- 6. Alfredo gave Fibonacci good advice before he went to Africa. Tell us about it.
- 7. What did Fibonacci discover about the way numerals were written in Africa? How were they different from the way they were written in Italy?
- 8. What did Fibonacci do when his father sent him on business trips throughout the world?
- 9. Fibonacci observed rabbits and this helped him to discover a pattern that is called the Fibonacci Sequence. How much of this pattern can you remember?
- 10. Which "Fibonacci numbers" did Leonardo Fibonacci see in nature?

Activities

- 1. Introduce Roman numerals to the class. Teach them to write basic sequences, depending upon the age of the students.
- 2. Have number sequence activities that include fill-ins that the teacher develops and original ones that the children create.
- 3. Initiate a discussion about the strengths we see in individuals that make them different in a positive way.
- 4. Demonstrate counting with an abacus if one is available.
- 5. Bring in objects that illustrate Fibonacci numbers and have a classroom demonstration: i.e., flowers, lemons, clovers.