# Neo Leo

## A RIF GUIDE FOR EDUCATORS

**Themes:** Inventions, Engineering, Careers

Grade Level: 3rd to 5th grade

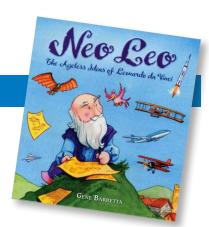
**Book Brief:** Many of the inventions we use today

were actually dreamed up by Leonardo da Vinci 500 years ago! This book introduces you to a few of them.

**Author and Illustrator:** Gene Barretta

Content **Connections:** 

Science, Math. Social Studies. Art





## TIME TO READ!

#### BEFORE WE READ, LET'S LOOK AT...

The Cover: Have students make predictions about the story based on the title

and cover illustration. Who is Leo? What does "neo" mean? What machines are pictured on the cover? How are they related?

**The Pictures:** Flip through some of the pictures. Explain that the pages on the right show reproductions of Leonardo's original designs from hundreds of years ago and the pages on the left show the more modern versions of those inventions.

Prior Knowledge: Who was Leonardo da Vinci? Ask students to throw out the first words that come to mind when they think of him. Explain that, in addition to being a famous artist, he was also a scientist and an inventor.

Vocabulary: glider, tank, pacifist, prototype, gear, primitive

Purpose for Reading: "As we read, think about the relationship between da Vinci's designs and the more modern inventions. Pay attention to which modern inventions were directly inspired by da Vinci and which weren't."

## WHILE WE READ

#### MONITORING COMPREHENSION

For each of the inventions, ask students to compare Leonardo's version with later versions. Can they see the connection?

- What inspires Leonardo's inventions? Give specific examples from the book.
- Which of Leonardo's inventions do you think has been the most useful? least useful?
- Which invention surprised you the most?



## **LET'S THINK ABOUT**

Our Purpose: "How do you think inventors who had never seen da Vinci's designs came up with ideas so similar to his? What does that tell us about the process of inventing?"

**Extending Our Thinking:** Ask students to think more deeply about the relationship between art and science. What traits do good artists have in common with good scientists, inventors, or mathematicians? What does the artistic process have in common with the scientific process?

#### **NOTE TO EDUCATORS**

- Extension Activities for Educators also available.
- Vocabulary Scaffolding Sheet also available.

