

The Man Who Measured the World

Small Group Reading

Before reading

Ask students to make predictions about the text based on the front cover. Who do students think the story is about? When is the story set? Where do they think the story takes place? Preview Reading vocabulary and discuss word meanings.

During reading

Ask students the following questions as you read each chapter.

CHAPTER 1

- What does Xenia see on the Royal Barge? (literal)
- What do you think courtiers are? (inferential)

CHAPTER 2

- How do you know that the sunlight does not shine into the well? (inferential)
- What does Eratosthenes use for drawing? (literal)

CHAPTER 3

- What is an obelisk? (literal)
- Explain what Xenia's father asks her to do in Aswan. (inferential)
- Look at the picture on page 15. What do you think the cylinder next to Eratosthenes is for? (inferential)

CHAPTER 4

- What was the discovery of Aristarchus of Rhodes? (literal)
- How long do you think the distance called a "stadia" might be? Why? (critical thinking)

CHAPTER 5

- What does Eratosthenes win? (literal)
- Why do you think the King chooses Eratosthenes' discovery? (inferential)

After reading

Students can complete BLMs 1 and 2 after you provide instructions for each activity.

Using graphic organizers Instruct students to label Eratosthenes's diagram on BLM 1 using appropriate terminology.

Spelling Have students complete the activity at the bottom of BLM 1 by writing their own definitions of each term to create a glossary. **(BLM 1)**

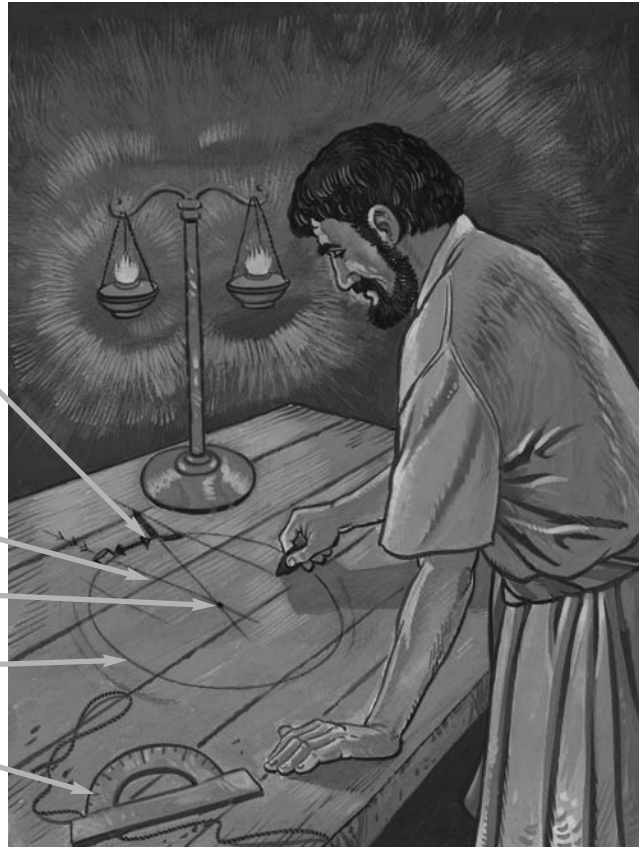
Using reference sources Encourage students to research Eratosthenes's mathematical discoveries using the Internet or other reference sources. Students should then fill out the activity on BLM 2 and share their knowledge with their classmates. **(BLM 2)**

Grammar With students, look through the text to find instances where exclamation marks are used. Write these sentences on the board and have students read the sentences with the proper expression. Then ask volunteers to read each sentence as if it ended with a period instead of an exclamation mark. Discuss the importance of using exclamation marks to express emotion.

Fluency Create a Readers Theater production using Chapter 4 of the text "The Greatest Discovery." Give each student a turn to read a part and assign one student the part of narrator. Encourage students to read their parts with expression.

➔ Labeling

Often when we look at diagrams they are labeled to help us recognize the various parts. Eratosthenes has not labeled his diagram on the kitchen table. Refer to the copy of his diagram below and label it using the following terminology: circumference, vertex, angle, protractor, center point. You may use a dictionary to assist you.



➔ Going further

Design a glossary by creating your own definitions for each of the following terms:

- angle
- center point
- circumference
- protractor
- vertex

