

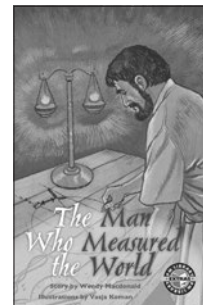
# The Man Who Measured the World

PM Level 30

Sapphire

**Text Type** Narrative

**Running Words** 3020



## Preparing for Guided Reading

### Orientation to the Text

- The King of Egypt offers a gold necklace and a journey in the Royal Barge to the person who can make the greatest scientific discovery. Xenia wants to win the ride and so encourages her father to enter the competition. She knows that Alexandria is a centre for scholars and that the competition will be strong. Will she be able to help her father calculate the circumference of the Earth?

### Prior Knowledge

- What text type is this? How do you know? What would you expect to find in this type of text? What do you predict this book will be about?
- Give the students the story synopsis. Ask them to predict the vocabulary and language features they might expect to find in the text.
- Record these words to review after the first reading. Ask students if they know anything about how the world is measured?

## Building the Balanced Reader

### Grammatical Conventions

- Discuss various action verbs, e.g. *frowned, smiled, smirked*.
- Draw students' attention to more complex sentence structures: *Eight sturdy rowers wearing linen skirts and beaded collars pulled smoothly in time making the barge glide in toward the library steps*.
- Revise correct punctuation for direct speech: "What are you going to discover for the King's competition, Father?"
- Locate exclamation marks used to guide expression, e.g. "Fifty days!" exclaimed Xenia.

### Vocabulary

#### Key vocabulary

*astonished, banquet, calculated, catalogue, circumference, galleys, obelisk, orchestra, papyrus, parallel, protractor, respectfully, scholars, scrolls, solstice, stadia, stern, sturdy*

### Spelling

- Identify compound words in the text, e.g. *shipyards, lighthouses*.

- Locate various methods used to make plurals, e.g. *discovery – discoveries, moss – mosses, wharf – wharves*.
- Use knowledge of suffixes to spell words correctly, e.g. *discovery, personally, sleepily*.

### Visual Literacy

- Look at the front cover. What text type is *The Man Who Measured the World*? What features suggest this?
- Look at the picture of Eratosthenes working at night at his kitchen table on p. 21. How do his materials and equipment differ from those of today?
- How has the illustrator created Xenia's sense of joy on pp. 30 and 31? How has his use of colour and layout contributed to this sense?

### Focusing on the Story – Guided Reading

- Describe what Xenia saw on the Royal Barge.
- Discuss the meaning of *courtiers* and explain what they might do.
- Talk about the shape and purpose of an obelisk.
- In their own words, ask students to explain what Xenia's father asked her to do in Aswan.
- Look at the picture on p. 15. What do you think the cylinder next to Eratosthenes is for?
- Using their own words, sat students to recall the other discoveries in the competition. Discuss the merits of each.
- How long do you think the distance called a *stadia* might be? Why?
- Consider the prize for first place in the competition. What does this tell you about the ranking of the King, over the other people in his kingdom?

### Comprehension

- What did Eratosthenes use for drawing? (*Literal*)
- How do you know that the sunlight does not shine into the well? (*Inferential*)
- Why do you think the King chose Eratosthenes' discovery? (*Applied Knowledge*)

### Follow-up Activities

- Encourage students to conduct some research on the Internet about Eratosthenes' other mathematical discoveries. Allow them to share their knowledge with their classmates.

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## Learning Intentions

- We are learning to understand that many people share their experiences to help others.
- We are learning to understand more complex language effects in narrative texts.

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## Success Criteria

- I can learn from the experiences of others and share my experiences with them.
- I can understand and use more complex language effects when I write narrative texts.

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## Guided Reading Notes

Student's name	Reading focus	Observations/notes	For follow-up