

## The Boy Who Loved Math

### Second Reading: Text & Vocabulary

The focus of this reading is to read the story and talk about new vocabulary. There will be opportunities in this reading to connect the information in the illustrations to the information in the text.

\*Read the pages before you ask the questions.

#### Pages 1 - 5:

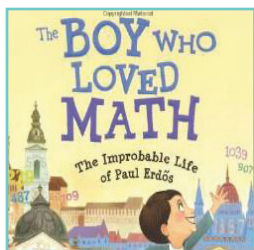
- On page 1, mathematician: an expert in math.
- On page 1, notice that Ms. Heiligman uses ellipses (...) frequently. Remember to make a long pause at an ellipsis to think, "What could the big problem be?"
- On page 3, infinity: without end. The mathematical symbol for infinity is in pink. Do you think that Paul's mother being a math teacher helped him to be an expert in math? Discuss.
- On page 4, Fräulein: a title of respect for an unmarried German woman. What rules might Paul have hated?
- On page 5, 100% of the time: all of the time, every bit of it.

#### Pages 6 - 11:

- Did Paul use a calculator or a computer to help him figure out the number of seconds that someone had been alive? How did he figure the answer? Is it probable or improbable that a four year old could compute this?
- On page 7, subtracted: to take a part away from the whole, the opposite of adding.
- There will be many math concepts and symbols. Explain as many as you wish. The important thing is to keep the story moving, and your child engaged.
- On page 7, <0: less than zero. Explain that negative numbers are less than zero which is very hard for a young mind to understand.
- On page 8, what is Paul's second big problem? Why doesn't Paul want to go to school any more?
- On page 9, a dash (-) is similar to an ellipsis, a long pause.
- On page 10, what causes Paul to change his opinion of Fräulein?

#### Pages 12 - 13:

- On page 12, read only the top sentence. Don't read the rest of the explanation on prime numbers. A simple statement will suffice: Prime numbers are a special kind of number, similar to a negative number being a special kind of number.



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### Pages 14 - 15:

- Why does Paul like high school?
- 1,000,000: one million. Explain that a million is a very, very big number.

### Pages 16 - 21:

- On page 16, why was Paul called a magician? What kind of magic could he perform? (He could entertain people by performing math problems that no one else could.)
- On page 17, do you know how to do the ordinary tasks that Paul didn't know how to do?
- On page 19, why didn't Paul "fit into the world in a regular way"?
- On page 20, could you fit everything that you own into two small suitcases? How can Paul accomplish that?
- On pages 20 and 21, Ms. Heiligman uses a colon (:). She likes to use special punctuation marks to get the reader to pause and get ready for some special information. Do you remember the other special punctuation marks she uses to tell you to pause for the special information that is coming? (ellipses, dashes) She likes to use symbols just like Paul did.

### Pages 22 - 25:

- On page 22, epsilon: small quantity. The definition is on page 22. Epsilon will be a fun vocabulary word to use. The next time that you want a small amount of something to eat say to your parents, "I would like epsilon, please." They will be very impressed!
- Would you want Paul to come to your house for a visit? Explain.
- On page 24, impatient: quickly irritated or provoked. Which picture shows Paul looking impatient?
- Discuss the questions on the bottom of page 25.

### Pages 26 - END:

- On page 26, genius: an exceptionally high or extraordinary intelligent person. Do you think that Paul is a genius?
- On page 28, generous: shares with others, unselfish.
- On page 29, what does the last sentence mean: "So Paul left this world while he was at a math meeting."? (He died.)
- What is your Erdős (pronounced AIR-dish) number?