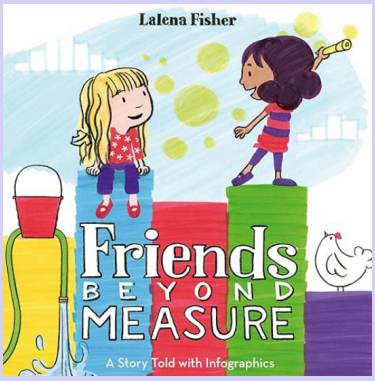


AUTHOR/ ILLUSTRATOR:
Lalena Fisher

Best friends Harwin and Ana learn that Harwin's family is moving far away.

Ages: 4 to 8 years

ATOS Reading Level: n/a

Lexile: n/a

ISBN: 9780063210523

Friends Beyond Measure

Will Ana and Harwin remain friends?

Topics: infographics, classifying, sorting, data analysis

Activities To Do Together:

Use *Friends Beyond Measure* to discuss and interpret different kinds of visual images or infographics with your child. In this story, author Lalena Fisher uses a variety of infographics to introduce characters Ana and Harwin, to show what the girls like to do, and to explain how they react when they learn that Harwin is going to move. Look at these informational images together and talk about what they are communicating. Much of the information that children encounter is explained through infographics. It's important for them to be comfortable interpreting infographics and to have experiences with different types of visual images.

Before reading the book:

- Tell your child that the story you're going to read includes maps, charts, diagrams, and timelines that are important parts of the story. These images are called infographics and they are used to explain what is happening.

While reading the book:

- Ask your child who is telling the story. Is it Ana, Harwin, or somebody else? Ask your child why they think so.
- Notice the things that the girls do at each other's homes. What do they spend the most time doing?
- Ask your child what the bar graph on pages 22 and 23 tells about the way Ana felt when she found out that Harwin was moving far away.

When you have finished reading the book:

- Ask your child what information they'd like to share and encourage them to make their own infographic.
- Look for other examples of infographics together. Discuss what is shown in the images and their purpose. Ask your child, "What story does the infographic have to tell?"

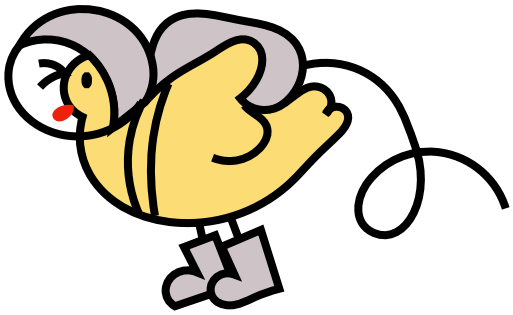
Questions for Mathematical Thinking:

1. What interests do Ana and Harwin have in common? How do you know?
2. Ana and Harwin both climb trees. What can you tell about their tree climbing ability from the graph on page 12?
3. Harwin collects horses. What does Ana's graph on page 13 tell you about Harwin's horses? Why do you think there is a sad face next to the word "real"?
4. Can you tell from the timeline on pages 14 and 15 how long it took for the girls to find Toto? If so, how long did it take? Why do you think the girls have frowns on their faces at 6:48?
5. Look at page 17. What kinds of places does Ana enjoy? How are the places that Ana enjoys different than the places Harwin enjoys? What types of places are they both ok with?
6. How did things change after Harwin told Ana that she was going to move. How do you know?
7. What did Ana consider when deciding if she could pack herself in Harwin's suitcase?

Early Math Project Resources:

Visit Friends Beyond Measure Activities (www.earlymathca.org/friends-beyond-measure)

Follow this link or visit earlymathca.org/external-resources for additional online resources



Vocabulary

Math words found in the story: chart, charting, full-size, giant, small, sorted, timeline

Related math words: bar chart, calendar, coordinate chart, flow chart, infographics, line chart, map, pictogram, pie chart, proportional area chart, ratio, schematic diagram, Venn diagram

Words to build reading comprehension: adventures, agreements, deafening, definitely, disagreements, dyslexia, ecstatic, envy, exploration, medical science, scenic

Related Books: *Show and Tell! Great Graphs and Smart Charts* by Stuart J. Murphy; *Tally O'Malley* by Stuart J. Murphy; *The Best Vacation Ever* by Stuart J. Murphy

Click this link to the World Catalog or enter bit.ly/49sMQTn to find *Friends Beyond Measure* in the public library.

Math Connections: *Friends Beyond Measure* tells a story with a variety of common infographics. It's important for children to have many opportunities to interpret infographics as they are an increasingly common way of communicating and organizing survey data, statistical information, events, new ideas, research, weather forecasts, bus routes, trends, directions, geographic information, and demographic information. Good infographics make it easier to understand information. They often make it simpler to spot trends, make comparisons, and make sense of complex information.

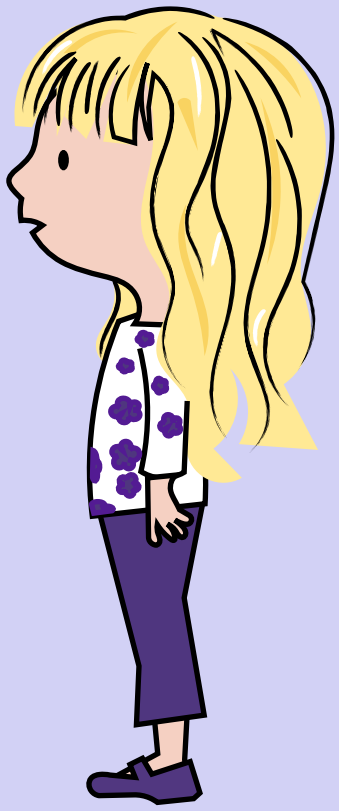
Encourage your child to look for infographics and make a list of the places they notice them. Share with your child that a good infographic should make sense on its own without any additional explanation. The title, labels, data, and images together should tell a complete story.

Encourage your child to experiment with making their own infographic. Ask them what data or information they'd like to share. Ask them how they will design their infographic so that somebody looking at it will easily understand what they are trying to communicate. Ask what title they will give their infographic to explain what it's about.

Your child might want to create an infographic that explains:

- The results of a survey question they asked friends
- How to play their favorite sport
- The timeline of their life with important events
- A common daily routine
- The interests of different people they know
- The steps of a favorite recipe
- A family safety plan
- Birthdays of friends and family

After your child has created an infographic, encourage them to show it to somebody and ask that person what they can tell from the infographic. Does it convey the information that your child intended? If not, encourage them to consider how they can add to or change their infographic so it is easy to understand.



Age Level	Related Preschool Foundations, and CA State Standards
Preschool/TK	**Algebra and Functions 1.0** Children begin to sort and classify objects in their everyday environment
Kindergarten	**Standards of Mathematical Practice** 1) Make sense of problems and persevere in solving them. 4) Model with mathematics. 5) Use appropriate tools strategically.
Grade 1	**Standards of Mathematical Practice** 1) Make sense of problems and persevere in solving them. 4) Model with mathematics. 5) Use appropriate tools strategically. **Measurement and Data 1. MD. 4** Represent and Interpret Data
Grade 2	**Standards of Mathematical Practice** 1) Make sense of problems and persevere in solving them. 4) Model with mathematics. 5) Use appropriate tools strategically. **Measurement and Data 2. MD. 10** Represent and Interpret Data - Draw a picture graph and a bar graph
Grade 3	**Standards of Mathematical Practice** 1) Make sense of problems and persevere in solving them. 4) Model with mathematics. 5) Use appropriate tools strategically. **Measurement and Data 3. MD. 10** Represent and Interpret Data