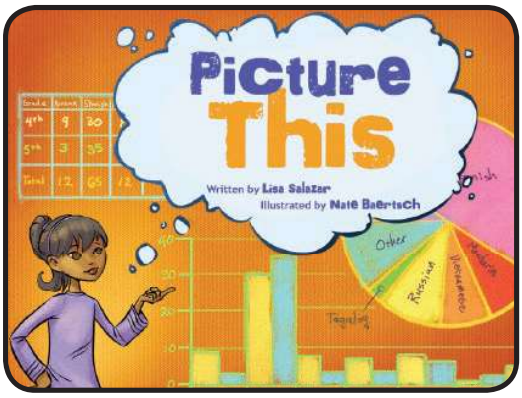
Name: _____



Picture This

Lesson 114

Paired with *The Record Breakers—Advanced*

Written by Lisa Salazar

Illustrated by Nate Baertsch

Lexile®: 920L, 556 words

Your teacher asks you to take a survey of which languages the fourth and fifth graders at your school speak—other than English. So you grab a pen and paper and start asking your friends which languages they speak. You find a few Spanish speakers here, a couple of Vietnamese speakers there. After a couple of hours, and lots of paper, you collect the last bit of data and find yourself with a big mess of numbers and tally marks. Now what?

If only the tally marks meant something and there was a clear way to compare the information. If only you could work with pictures instead of numbers. It would be easier to grasp the results of your survey. Well, picture this—graphs are a great way to visually organize your information. Start by building a table.

You can put away the hammer and nails because this table has rows and columns, not four legs and a table top. A table allows you to quickly find the information you want. It's a good place to look if you want to find exact data. For example, if you wanted to know how many fifth graders speak Russian, follow the 5th Grade row to the right until you reach the Russian column. Wow—six students in fifth grade speak Russian!

But what if you wanted to quickly see which language was the most common? There are so many columns that it could take a while to compare the numbers. Picture this—a great way to compare numbers is to make a pie.

But this pie has colors and percentages, not cherries or cream filling. This pie might not be very tasty, but it's very helpful. A pie chart quickly shows how one part compares to the whole. The whole pie represents the total number of students, and each slice represents the number of students that speak a certain language. For example, the Spanish slice is the biggest—which means Spanish is spoken more than all the other foreign languages.

When you looked at the table, it seemed like lots of students speak Vietnamese. Ten students, which is nearly half your class! But when you look at

Name: _____

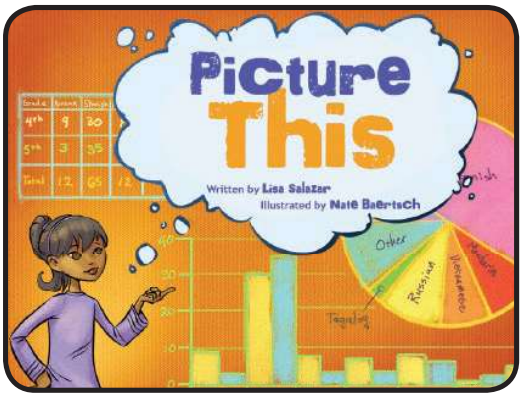
the same information in a pie chart, you see that the Vietnamese slice is very thin. When compared to the whole (130 students speak another language), Vietnamese seems much less common.

Now you want to compare the fourth graders to the fifth graders. If you want to see which grade has the most Korean speakers, you might have a difficult time since it's not easy to see which pie slice is bigger. Picture this—you need to use some bars.

But not candy bars—and not metal bars either! You need a bar graph, which allows you to quickly compare lots of information at the same time. The taller the bar is, the higher the number it represents. If you follow the top of the bar to the left, you can see exactly how many students speak each language. Look how easy it is to see that more fourth graders speak Korean than fifth graders do. You can also see that Tagalog is the least common language spoken.

Tables, pie charts, and bar graphs all help organize data. It all depends on the type of picture you want to see.

Name: _____



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ACCURACY: # of reading errors: _____ (Indep. = 0–11, Instr. = 12–28, Frust. = 29+)
SPEED: To calculate: 33360 ÷ _____ (Reading time in seconds) = _____WPM

Name: _____

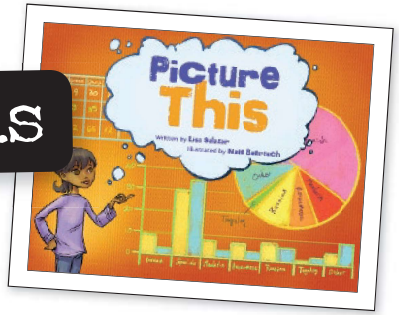
Picture This

Lesson 114
Paired with *The Record Breakers—Advanced*

Discover Story Vocabulary	survey , compare, graph
Glossary Words	survey, data, compare, common, pie chart

Question Type	Question
Contrast	How is a table different from a bar graph? a. A table is only numbers, but a bar graph has shapes and numbers. b. A table uses circles to show information, and a bar graph uses rectangles. c. A table is much larger than a bar graph, so it can show more information.
Intertextual	"The Record Breakers" and "Picture This" **both** tell how to make a _____. a. bar graph b. table c. pie chart
Author's Purpose	Why did the author probably write this article? a. to teach people about different kinds of graphs b. to teach people how to do surveys c. to teach people how to count fourth and fifth graders

Main Idea and Supporting Detail: Picture This

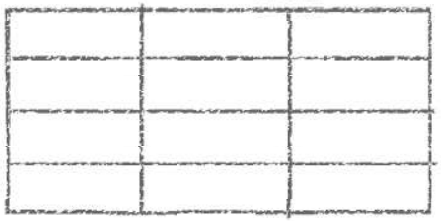


✱ **Directions:** Fill in the empty boxes with illustrations, and then write a summary of the article.

Ways to organize information

Table

Example



Pie chart

Example (draw a picture)

Bar graph

Example (draw a picture)

My summary of the article

Name:

Graphic Organizer: Picture This (advanced)
Reading Lessons: Leveled Books