Name _____

Organize Data

I Can organize data in a table to solve problems.

Florida's B.E.S.T.

- **Data Analysis & Probability** 3.DP.1.1, 3.DP.1.2
- **Mathematical Thinking & Reasoning** MTR.1.1, MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1, MTR.6.1

UNLOCK the Problem

Real World

The students in Alicia's class voted for their favorite yogurt flavor. They organized the categorical data in this tally table. **Categorical data** are data that can be divided into groups, such as flavors of yogurt.

How many more students chose chocolate than strawberry?

Favorite Yogurt Flavor	
Flavor	**Tally**
vanilla	𝍸 ||
chocolate	𝍸 |||
strawberry	||||

Read the Problem

What do I need to find?

How many more students chose _____

than _____ yogurt as their favorite?

What information do I need to use?

the data about favorite _____ in the tally table

How will I use the information?

I will count the _____ and put the numbers in a **frequency table**. A frequency table uses numbers to record data. Then I will compare the number of students who chose chocolate to the number of students who chose strawberry.

Solve the Problem

Favorite Yogurt Flavor	
Flavor	**Votes**
vanilla	

Count the tally marks. Record _____ for vanilla. Write the other flavors and record the number of tally marks.

To compare the number of students who chose strawberry and the number of students who chose chocolate, subtract.

_____ − _____ = _____

So, _____ more students chose chocolate as their favorite flavor.

Math Talk

MTR 4.1 Engage in discussions on mathematical thinking.

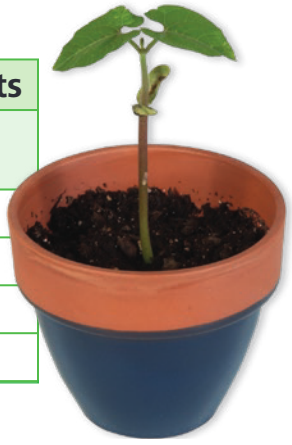
Why would you record data in a frequency table?

Try Another Problem

Two classes in Carter's school grew bean plants for a science project. The heights of the plants after six weeks are shown in the tally table. The plants were measured to the nearest inch. How many fewer bean plants were 9 inches tall than 7 inches and 8 inches combined?

Bean Plant Heights

Height in Inches	Tally
7	𝍸 ||||
8	𝍸 |||
9	𝍸 𝍸 ||
10	𝍸 ||||



Read the Problem	Solve the Problem
What do I need to find?	**Record the steps you used to solve the problem.**
What information do I need to use?	
How will I use the information?	

- Suppose the number of 3-inch plants was half the number of 8-inch plants. How many 3-inch bean plants were there?

_____

Math Talk

TR 2.1 Demonstrate understanding in multiple ways.

What is another strategy you could use to solve the problem?

Name _____

Share and Show Math Board

Use the Shoe Lengths table for Problems 1–3.

Shoe Lengths		
Length in Centimeters	Tally	
	Class 1	Class 2
18	𝍸 |	||||
19	𝍸	||||
20	𝍸 |||	𝍸 ||||
21	𝍸 ||	𝍸
22	𝍸 ||||	𝍸 ||

1. The students in two third-grade classes recorded the lengths of their shoes to the nearest centimeter. The data are in the tally table. How many more shoes were 18 or 22 centimeters long combined than 20 centimeters long?

First, count the tally marks and record the data in a frequency table.

Shoe Lengths		
Length in Centimeters	Number	
	Class 1	Class 2
18		
19		
20		
21		
22		

To find the number of shoes that were 18 or 22 centimeters long, add

6 + _____ + _____ + _____ = _____.

To find the number of shoes that were

20 centimeters long, add _____ + _____ = _____.

To find the difference between the shoes that were 18 or 22 centimeters long and the shoes that were 20 centimeters long, subtract the sums.

_____ − _____ = _____.

So, _____ more shoes were 18 or 22 centimeters long than 20 centimeters long.

2. How many fewer shoes in Class 1 were 19 centimeters long than 22 centimeters long?

_____

On Your Own

3. What if the length of 5 more shoes in Class 1 measured 21 centimeters? Explain how the table would change.

MATH on the Spot

_____

_____

Use the table for Problems 4–6.

Favorite Outdoor Game	
Game type	**Number**
Hide-and-Seek	14
Jump Rope	9
Scavenger Hunt	6
Tag	16

4. TR Raj asked his classmates to choose their favorite outdoor game. His results are shown in the frequency table. How many more students chose hide-and-seek than scavenger hunt?

_____

5. How many students in all chose tag, jump rope, or hide-and-seek?

_____

6. If 6 students changed their choice from tag to hide-and-seek, how would the data for those two categories change?

_____

7. Jade made this tally table to record how many students have different types of pets.

Students' Pets	
Type of pet	**Tally**
dog	𝍸 𝍸 ||||
rabbit	|||
hamster	𝍸
cat	𝍸 ||

For Problems 7a–7d, choose True or False for each statement.

7a. Nine fewer students have hamsters than have dogs. ○ True ○ False

7b. Seven students have cats. ○ True ○ False

7c. Fewer students have cats than hamsters. ○ True ○ False

7d. More students have dogs than all other animals combined. ○ True ○ False

Name _____

Use Pictographs

Florida's B.E.S.T.

- **Data Analysis & Probability** 3.DP.1.2
- **Mathematical Thinking & Reasoning** MTR.1.1, MTR.2.1, MTR.4.1, MTR.5.1

I Can read and use data in a pictograph to solve problems.

UNLOCK the Problem Real World

Nick made a pictograph that shows how some students get to school. His pictograph has a title, labels and a key. How many students ride the bus?

- Underline the words that tell you where to find the information to answer the question.
- How many ☺ are shown for Bus?

_____

How We Get to School	
Walk	☺ ☺ ☺
Bike	☺ ☺ ☺ ☺
Bus	☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺
Car	☺ ☺ ☺ ☺ ☺ ☺
Key: Each ☺ = 10 students.	

Each row has a label that names one way students get to school.

The title says that the pictograph is about how some students get to school.

The key tells that each picture or symbol stands for 10 students.

To find the number of students who ride the bus, count each ☺ as 10 students.

10, 20, _____, _____, _____, _____, _____, _____

You can also multiply 10 by the number of ☺.

_____ × 10 = _____

So, _____ students ride the bus to school.

1. How many fewer students walk than ride the bus?

   _____

2. How many students were surveyed? _____

3. How can you use multiplication to find how many students ride in a car?

   _____

Use a Half Symbol

How many students chose an orange as their favorite fruit?

Math Idea

Half of the picture stands for half the value of the whole picture.

= 2 students

= 1 student

Our Favorite Fruit	
Banana	
Apple	
Pear	
Orange	
Key: Each = 2 students.	

Count the in the orange row by twos. Then add 1 for the half symbol.

2, 4, _____, _____ _____ + _____ = _____

So, _____ students chose an orange as their favorite fruit.

Share and Show

Math Board

Use the Number of Books Students Read pictograph for Problems 1–3.

Number of Books Students Read	
September	
October	
November	
Key: Each = 2 books.	

1. What does stand for?

Think: Half of 2 is 1.

_____

2. How many books did the students read in September?

_____

3. How many more books did the students read in October than in November?

_____

Math Talk

TR 4.1 Engage in discussions on mathematical thinking.

How does the graph change if 6 fewer books were read in October and 3 more books were read in September?

Name _____

On Your Own

Use the Favorite Game pictograph for Problems 4–10.

Favorite Game	
Puzzles	5
Card Games	3 and 1
Board Games	6
Key: Each = 4 students.	

4. Write a multiplication equation to find how many students chose puzzles.

_____

5. If 6 more students voted for card games and 4 more students voted for board games, how many more students voted for puzzles and card games than board games?

_____

6. MTR Which two types of games did a total of 34 students choose?

_____

7. How many students were surveyed?

_____

8. How many students did not choose card games?

_____

9. WRITE Math Jacob said one more student chose board games than puzzles. Explain his error.

_____

_____

_____

10. What if computer games were added as a choice and more students chose it than puzzles, but fewer students chose it than board games? How many students could have chosen computer games?

_____

Problem Solving · Applications

Use the pictograph for Problems 11 and 12.

Favorite Camp Activity	
Biking	
Hiking	
Boating	
Fishing	
Key: Each = 6 students.	

11. The students who went to summer camp voted for their favorite activity. Which two activities received a total of 39 votes?

a. What do you need to find?

_____

b. What steps will you use to solve the problem?

_____

c. Show the steps you used to solve the problem.

d. Complete the sentences.

Each = _____ students.

Each = _____ students.

votes for biking + hiking = _____

votes for hiking + boating = _____

votes for biking + boating = _____

votes for fishing + hiking = _____

So, _____ received a total of 39 votes.

12. Circle the word from each box that makes the sentence true.

Fifteen fewer students voted for [hiking / boating / fishing] than for [hiking / boating / fishing].

Name _____

Make Pictographs

I Can draw a scaled pictograph to represent data in a table and solve problems about the data.

Florida's B.E.S.T.

- **Data Analysis & Probability** 3.DP.1.1, 3.DP.1.2
- **Mathematical Thinking & Reasoning** MTR.1.1, MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1, MTR.7.1

UNLOCK the Problem

Real World

Delia made the table *Field Trip Choices*. She used it to record the places the third-grade classes would like to go during a field trip. How can you show the data in a pictograph?

Field Trip Choices

Place	Number
museum	6
science center	15
aquarium	12
wildlife park	9

Make a pictograph.

STEP 1

Write the title at the top of the pictograph. Write the name of a place in each row.

STEP 2

Look at the numbers in the table. Choose a picture for the key, and tell how many students each picture represents. Write the key at the bottom of the graph.

STEP 3

Draw the correct number of pictures for each field trip choice.

Museum	
Key: Each ___ = ___ students.	

- How did you decide how many pictures to draw for the science center?

_____

_____

Try This! Make a pictograph from data you collect. Take a survey or observe a subject that interests you. Collect and record the data in a frequency table. Then make a pictograph. Decide on a symbol and a key. Include a title and labels.

Key:	

Share and Show

Math Board

Jeremy pulled marbles from a bag one at a time, recorded their color, and then put them back. Make a pictograph of the data. Use this key:

Each ◯ = 2 marbles.

Jeremy's Marble Experiment	
Color	**Number**
blue	4
green	11
red	8

Key:	

Use your pictograph above for Problems 1 and 2.

1. How many circles did you use for the number of red marbles? Explain why.

2. Why do you need to use a half circle when showing the number of green marbles?

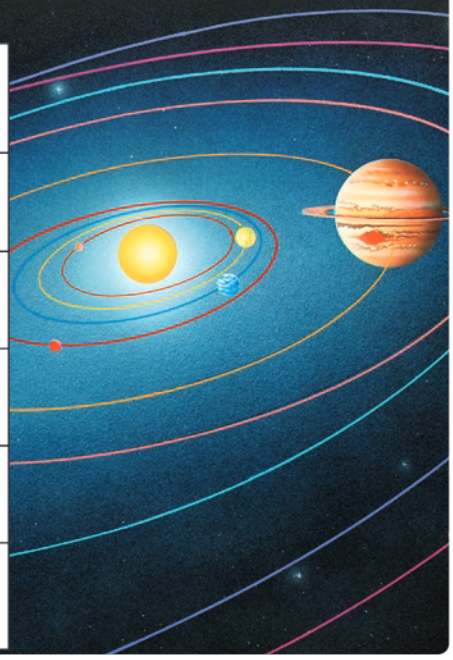
Name _____

On Your Own

3. MTR Two classes from Delia's school visited the science center. They recorded their favorite exhibit in the tally table. Use the data in the table to make a pictograph. Use this key:

Each ☼ = 4 votes.

Favorite Exhibit	
Exhibit	**Tally**
nature	𝍸 |
solar system	𝍸 |||
light and sound	𝍸 𝍸 ||||
human body	𝍸 |||



Key:	

Use your pictograph for Problems 4–6.

Math Talk

MTR 5.1 Use patterns and structure.

How can you decide on the number for the key?

4. Which exhibits received the same number of votes?

_____

5. MTR What if a weather exhibit received 22 votes? Explain how many pictures you would draw.

_____

6. What if the Solar System exhibit received 15 votes? Would it make sense to use the key, Each ☼ = 4 votes, to represent 15 votes? Explain.

_____

Problem Solving · Applications

7. While at the science center, Delia's classmates learned how many teeth some mammals have. Use the data in the table to make a pictograph. Use this key:

Each △ = 4 teeth.

Teeth in Mammals	
Animal	**Number**
hamster	16
cat	30
dog	42
cow	32

Key:	

Use your pictograph for Problems 8–10.

MATH on the pot

8. Write a problem that can be solved by using the data in your pictograph. Then solve the problem.

9. How many fewer teeth do cats and hamsters have combined than dogs and cows combined?

10. How many pictures would you draw for Cat if each △ = 5 teeth? Explain your reasoning.

Name _____

Use Bar Graphs

Florida's B.E.S.T.
- **Data Analysis & Probability** 3.DP.1.2
- **Mathematical Thinking & Reasoning** MTR.1.1, MTR.4.1, MTR.5.1, MTR.6.1

I Can read and interpret data in a bar graph.

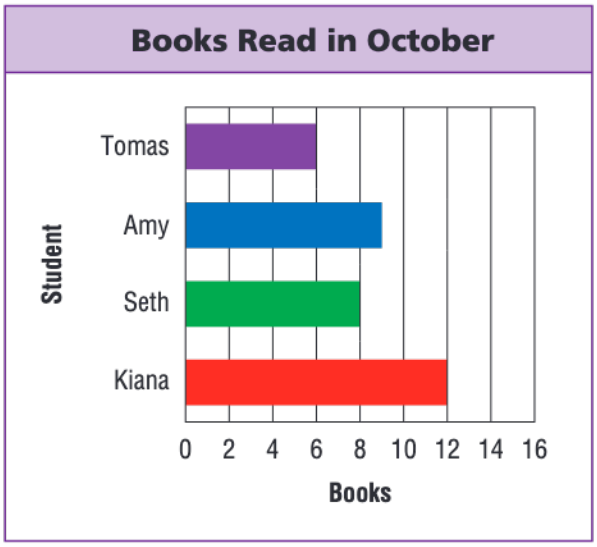
UNLOCK the Problem Real World

A bar graph uses bars to show data. A **scale** of equally spaced numbers helps you read the number each bar shows.

The students in the reading group made a bar graph to record the number of books they read in October. How many books did Seth read?

- Underline the words that tell you where to find the information to answer the question.

The title tells what the bar graph is about.



The length of a bar tells how many books each student read.

The scale is 0–16 by twos.

Each bar is labeled with a student's name.

Math Talk MTR 4.1 Engage in discussions on mathematical thinking.

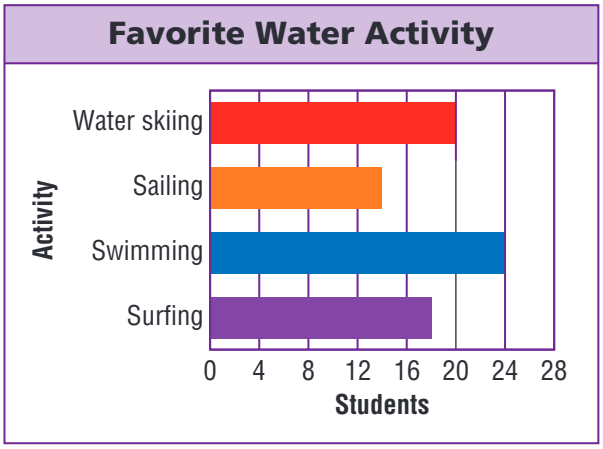
Explain how to read the bar that tells how many books Amy read.

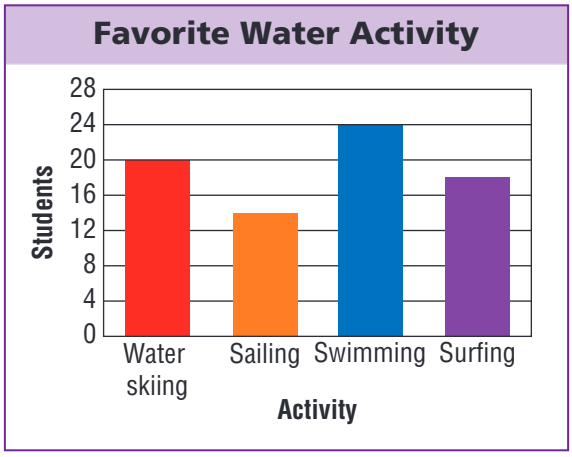
Find the bar for Seth. It ends at _____.

So, Seth read _____ books in October.

1. How many books did Tomas read? _____
2. Who read 4 fewer books than Kiana? _____
3. What if Amy read 5 more books? How many books did Amy read? Shade the graph to show how many she read. _____

More Examples These bar graphs show the same data.





In a **horizontal bar graph**, the bars go across from left to right. The length of the bar shows the number.

In a **vertical bar graph**, the bars go up from the bottom. The height of the bar shows the number.

4. What does each space between two numbers represent?

_____

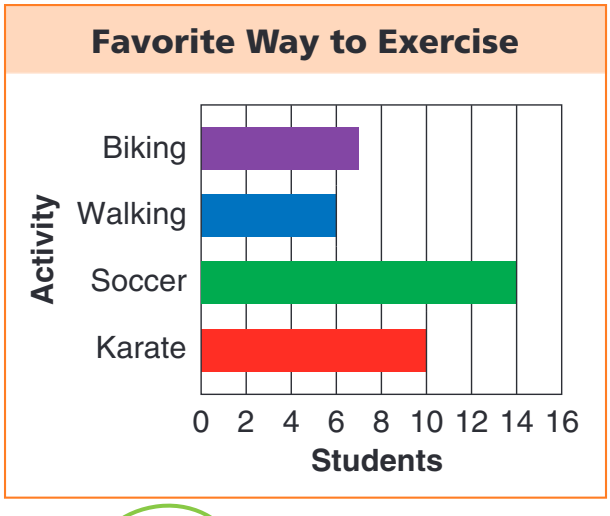
5. Why do you think the scale in the graphs is 0 to 28 by fours instead of 0 to 28 by ones? What other scale could you use?

_____

_____

Share and Show Math Board

Use the Favorite Way to Exercise bar graph for Problems 1–3.



1. Which activity did the most students choose?

Think: Which bar is the longest?

_____

2. How many students answered the survey? _____

3. Which activity received 7 fewer votes than soccer? _____

Math Talk

TR 5.1 Use patterns and structure.

What can you tell just by comparing the lengths of the bars in the graph?

Name _____

On Your Own

Use the Favorite Kind of Book bar graph for Problems 4–9.

4. How many students chose nature books?

_____

5. Which type of book was chosen by two times as many students as nature books? Write a multiplication equation to show how you know.

_____

6. How many books does the space between each line on the bar graph represent?

_____

7. How many lines high is the bar for sports books? Write a multiplication equation to show why the Sports bar is that many lines high.

_____

8. MTR What if 10 more students were asked and they chose books about animals? Describe what the bar graph would look like.

_____

_____

9. For Problems 9a–9c choose True or False for each statement.

9a. More students chose books about sports than any other kind of book. ○ True ○ False

9b. Three times as many students chose books about animals than books about nature. ○ True ○ False

9c. Ten fewer students chose books about puzzles than books about sports. ○ True ○ False

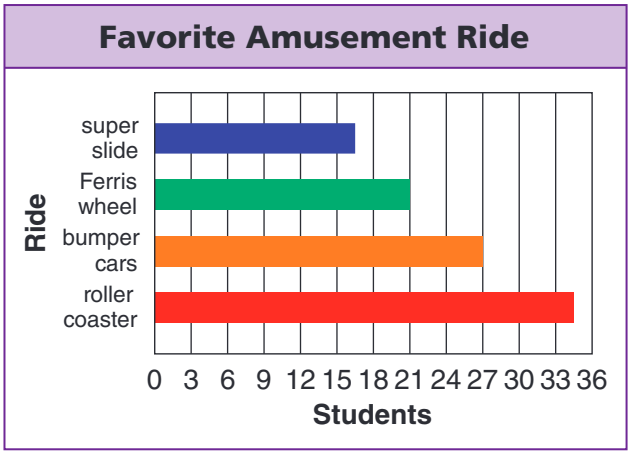
Problem Solving · Applications

10. The table shows data about some students' favorite amusement park rides. Four students graphed the data. Which student's bar graph makes sense?

Favorite Amusement Ride

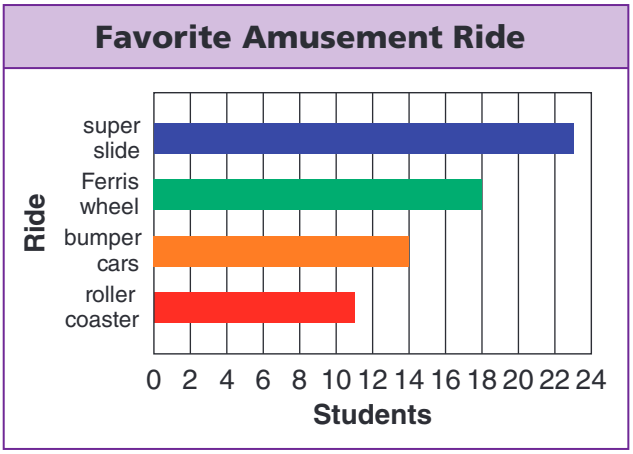
Ride	Number of Students
super slide	11
Ferris wheel	14
bumper cars	18
roller coaster	23

Favorite Amusement Ride



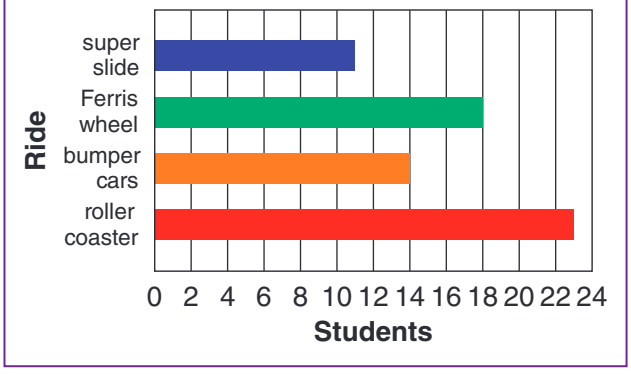
Rosalia

Favorite Amusement Ride



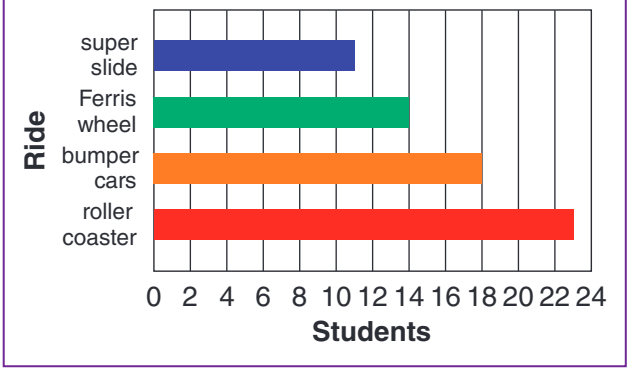
Spencer

Favorite Amusement Ride



Trevon

Favorite Amusement Ride



Monique

- Explain why the other bar graphs do not make sense.

Name _____

Make Bar Graphs

Florida's B.E.S.T.

- **Data Analysis & Probability** 3.DP.1.1, 3.DP.1.2
- **Mathematical Thinking & Reasoning** MTR.1.1, MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1, MTR.7.1

I Can draw a bar graph to represent data from a table or pictograph.

UNLOCK the Problem Real World

Jordan took a survey of his classmates' favorite team sports. He recorded the results in the table. How can he show the results in a bar graph?

Favorite Team Sport

Sport	Tally
Soccer	𝍸 𝍸 ||
Basketball	||||
Baseball	𝍸 𝍸 ||||
Football	𝍸 ||||

Make a bar graph.

STEP 1

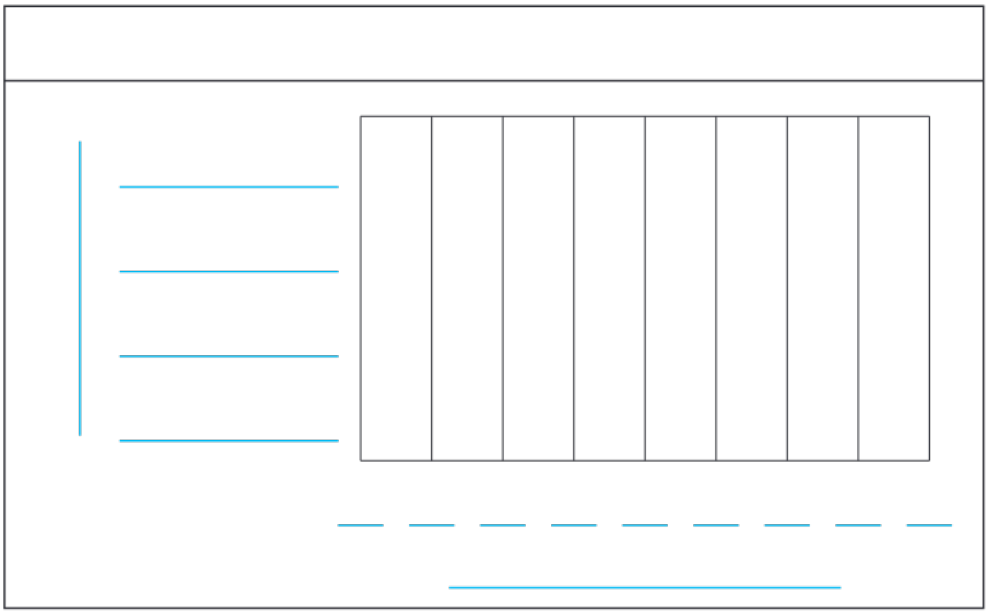
Write a title at the top to tell what the graph is about. Label the side of the graph to tell about the bars. Label the bottom of the graph to explain what the numbers tell.

STEP 2

Choose numbers for the bottom of the graph so that most of the bars will end on a line. Since the least number is 4 and the greatest number is 14, make the scale 0–16. Mark the scale by twos.

STEP 3

Draw and shade a bar to show the number for each sport.



Math Talk

MTR 2.1 Demonstrate understanding in multiple ways.

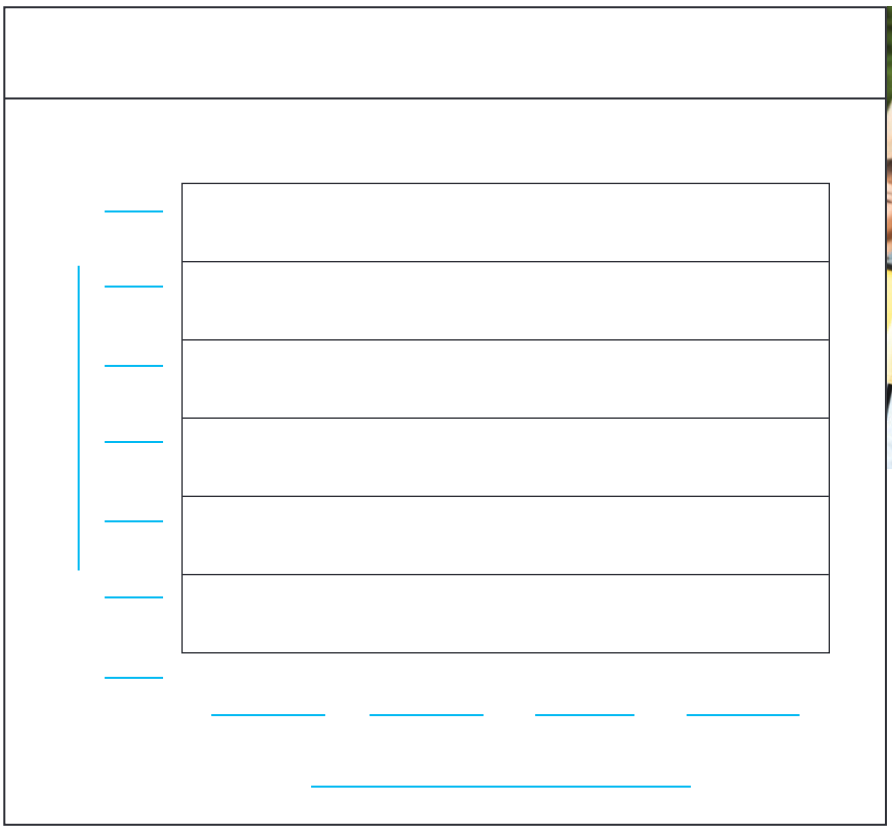
How did you know how long to draw the bar for each of the sports?

Share and Show

Math Board

Mateo's school is having a walk-a-thon to raise money for the school library. Mateo made a pictograph to show the number of miles some students walked. Make a bar graph of Mateo's data. Use a scale of 0–_____, and mark the scale by _____.

School Walk-a-Thon	
Sam	
Mateo	
Ben	
Erica	
Key: Each = 2 miles.	



Math Talk

TR 4.1 Engage in discussions on mathematical thinking.

How would the graph have to change if another student, Daniel, walked double the number of miles Erica walked?

Use your bar graph for Problems 1–4.

1. Which student walked the most miles? _____

   Think: Which student's bar is the tallest?

2. How many more miles would Mateo have had to walk to equal the number of miles Erica walked? _____

3. How many miles did all the students walk together? _____

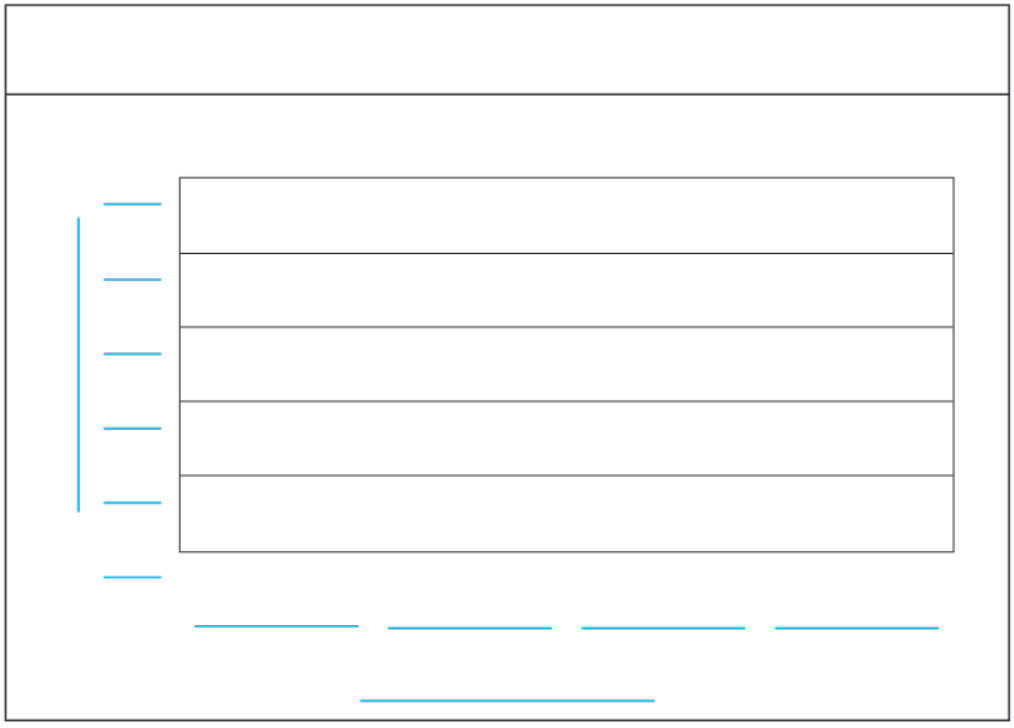
4. Write a multiplication equation that shows Erica walked 4 times as many miles as Ben. Is her bar 4 times as high as Ben's? _____

Name _____

On Your Own

5. Imari and Joey did an experiment with a spinner. Imari recorded the result of each spin in the table. Use the data in the table to make a bar graph. Choose numbers and a scale and decide how to mark your graph.

Spinner Results	
Color	Tally
Red	𝍸 𝍸 𝍸 |
Yellow	𝍸 |||
Blue	𝍸 𝍸 ||
Green	𝍸 𝍸



Common Error

Be sure to draw the bars correctly when you transfer data from a table.

Use your bar graph for Problems 6–8.

6. The pointer stopped on _____ two times as often as it stopped on _____.

7. The pointer stopped on green _____ fewer times than it stopped on blue and yellow combined.

8. MTR Explain why you chose the scale you did.

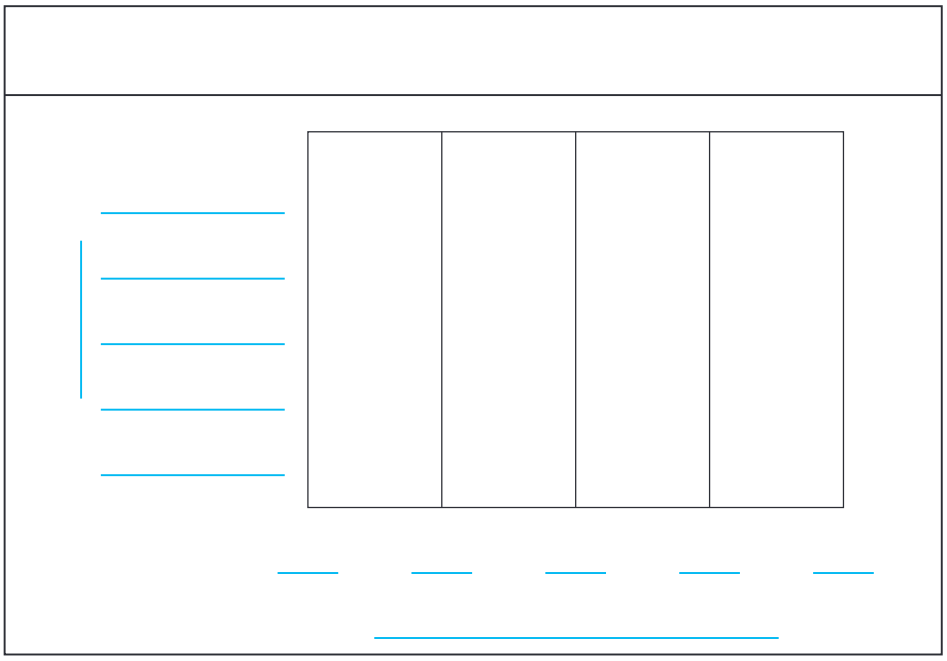
_____

_____

Problem Solving · Applications

9. TR A coach recorded the number of points some basketball players scored. Use the data in the table to make a bar graph. Choose numbers so that most of the bars will end on a line.

Points Scored	
Player	**Number of Points**
Billy	10
Dwight	30
James	15
Raul	25
Sean	10



Use your bar graph for Problems 10–12.

10. Which player scored more points than James but fewer points than Dwight? _____

11. Write and solve a new question that matches the data in your bar graph.

MATH on the pot

_____

_____

12. Whose bar is 3 times as long as Billy's? Write a multiplication equation to show why it is 3 times as long.

_____

Name _____

Use and Make Line Plots

Florida's B.E.S.T.

- **Data Analysis & Probability** 3.DP.1.1, 3.DP.1.2
- **Mathematical Thinking & Reasoning** MTR.1.1, MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1, MTR.7.1

I Can read and interpret data in a line plot and use data to make a line plot.

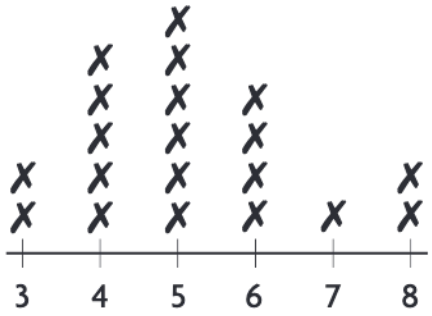
UNLOCK the Problem Real World

A **line plot** uses marks to display each piece of data above a number line. It helps you see groups in the data.

Some students took a survey of the number of letters in their first names. Then they recorded the data in a line plot.

How many students have 6 letters in their first names?

Each ✗ stands for 1 student. →



Number of Letters in Our First Names

← The numbers show the number of letters in a name.

Find 6 on the number line. The 6 stands for 6 _____.

There are _____ ✗s above the 6.

So, _____ students have 6 letters in their first names.

1. Which number of letters was found most often? _____

2. Write a sentence to describe the data. _____

_____

3. How many letters are in your first name? _____

4. Put an ✗ above the number of letters in your first name.

Math Talk MTR 4.1 Engage in discussions on mathematical thinking.

What information can the shape of a graph tell you about the data used to create the graph?

Activity Make a line plot.

The heights of students are measured to the nearest inch. Each student is represented with a tally mark. Make a line plot to show the data in the table.

Heights in Inches	
Number of Inches	Tally
49	|
50	𝍸
51	
52	𝍸 |
53	𝍸 ||
54	𝍸
55	||
56	|

STEP 1 Write a title below the number line to describe your line plot.

STEP 2 Write the number of inches in order from left to right above the title.

STEP 3 Count the tally marks next to each number of inches.

STEP 4 Draw an ✗ above the number line to show each student's height.

_____ _____ _____ _____ _____ _____ _____ _____

_____

5. Which height appears most often? _____

Think: Which height has the most ✗s?

6. How can you find the total number of students whose height was measured? _____

7. Complete the sentence. Most of the students are _____ inches tall or taller.

8. Is there any height for which there are no data? Explain.

_____

_____

Name _____

Share and Show

Math Board

1. Measure the length of three drawing tools from your desk to the nearest inch. Combine your data with several other classmates. Record the lengths in the table.

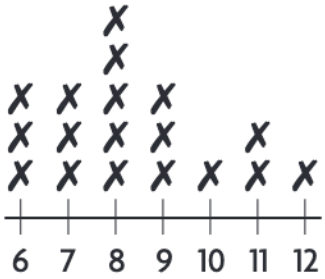
Lengths in Inches	
Number of Inches	Tally

2. Make a line plot to show the data you collected.

3. Which length appears most often? _____

On Your Own

Use the line plot for Problems 4–6.



Height of Avocado Plants (in Inches)

4. MTR Garden club members recorded the height of their avocado plants to the nearest inch in a line plot. Write a sentence to describe what the line plot shows.

_____

_____

5. How many more plants are 8 or 9 inches tall than are 6 or 7 inches tall? Explain.

MATH on the Spot

_____

_____

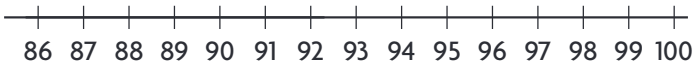
6. How many plants are taller than 8 inches?

_____ plants

Connect to Reading

Make an Inference

Addison made a line plot to show the high temperature every day for one month.
What *inference* can you make about what season this is?



Daily High Temperatures (in °F)

Remember

The Four Seasons

spring

summer

fall

winter

When you combine what you see with what you already know to come up with an idea, you are making an inference.

You can use what you know about weather and the data in the line plot to make an inference about the season.

You know that the numbers in the line plot are the high temperatures recorded during the month.

The highest temperature recorded was _____.

The lowest temperature recorded was _____.

The temperature recorded most often was _____.

Since all the high temperatures are greater than 85 °F, you know the days were hot. This will help you make an inference about the season.

So, you can make an inference that the season is _____.

Name _____

Use Circle Graphs

Florida's B.E.S.T.

- **Data Analysis & Probability** 3.DP.1.2
- **Mathematical Thinking & Reasoning** MTR.1.1, MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1

I Can read and interpret data in a circle graph.

UNLOCK the Problem Real World

A **circle graph** shows how parts of the data are related to the whole and to each other.

The circle graph represents the amount of time Mikel works out. Each section in the circle represents the amount of time Mikel spent doing each activity. How much time did Mikel spend swimming?

The title tells what the circle graph is about.

The size of the section shows the time for each activity.

Each section is labeled with a time and an activity.

Math Talk MTR 4.1 Engage in discussions on mathematical thinking.

Suppose the sections of the graph did not have times on them. How could you use the graph to compare the times Mikel spent on any two activities?

Find the section for Swimming. Its time is _____.

Mikel swims for _____.

1. For how long did Mikel run? _____
2. Which activity did Mikel do for the longest? _____
3. How many total hours was Mikel's workout? _____

More Examples Use the circle graph for Problems 4–7.

Dominic played after school at his neighborhood playground. The circle graph shows how many minutes he spent playing on each part of the playground.

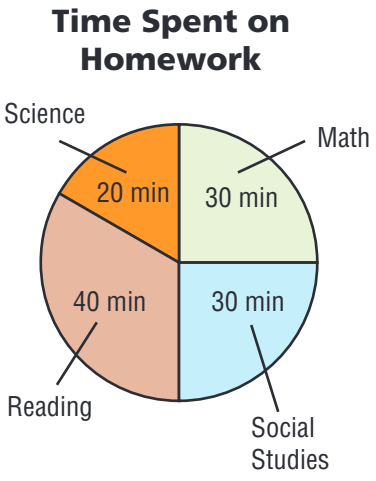
4. Which parts of the playground did Dominic play on for the least amount of time?

5. How many more minutes did he play on the swings and jungle gym than on the slide and spring rider?

6. How many minutes did Dominic play on the playground in all?

Share and Show Math Board

Use the Homework graph for Problems 1–3.



1. For which subject did the student spend the most time studying?

2. For which two subjects did the student study the same amount of time?

3. How many minutes did the student spend studying in all?

Math Talk

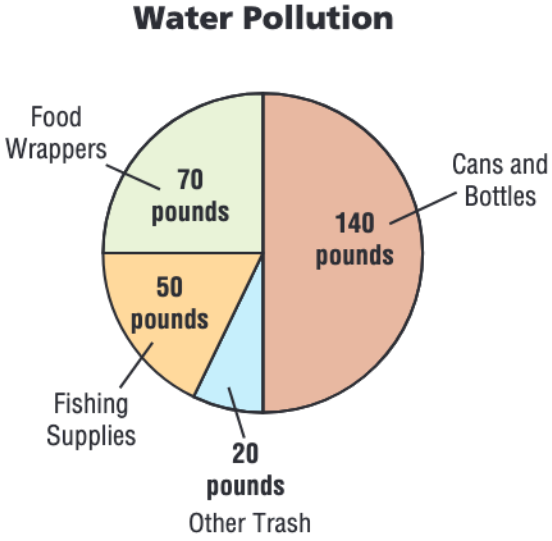
TR 5.1 Use patterns and structure.

How could you still tell which subject the student spent the most time on if the times in minutes were removed?

Name _____

On Your Own

Use the Water Pollution graph for Problems 4–8.



4. Which two kinds of pollution represent most of the pollution in the water?

_____

5. Which type of pollution represents the smallest amount?

_____

6. MTR How many pounds of the pollution is from food wrappers and fishing supplies? Explain.

_____

7. What happens to the circle graph if Clothing is added as another category?

_____

_____

MATH on the Spot

8. For problems 8a–8d, select True or False for each statement.

8a. There was about the same amount of Fishing Supplies pollution as Other Trash pollution. ○ True ○ False

8b. There were twice as many pounds of Cans and Bottles as Food Wrappers. ○ True ○ False

8c. If you add the Fishing Supplies, Food Wrappers, and Other Trash, you still don't have as much as the Cans and Bottles. ○ True ○ False

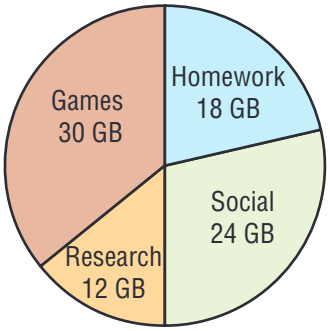
8d. Sunglasses would be counted in the Other Trash category. ○ True ○ False

Problem Solving · Applications

9. The table shows data about computer usage. Four students graphed the data. Which student's circle graph makes sense?

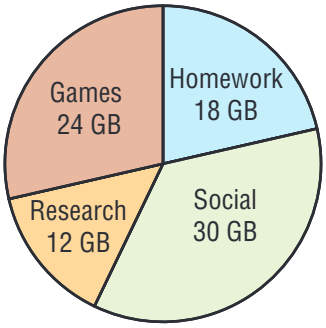
Computer Usage	
Activity	**Number of Gigabytes(GB)**
Homework	18
Social	30
Research	12
Games	24

Computer Usage



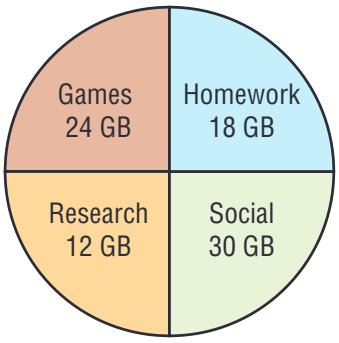
Yvonne

Computer Usage



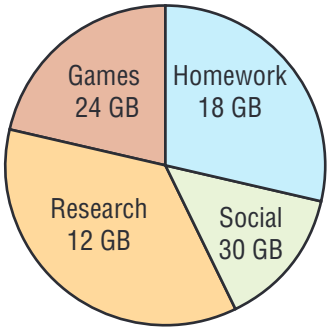
Terrence

Computer Usage



Sharna

Computer Usage



Oliver

- Explain why the other circle graphs do not make sense.

Name _____

Solve One- and Two-Step Problems Using Data

Florida's B.E.S.T.

- **Data Analysis & Probability** 3.DP.1.1, 3.DP.1.2
- **Mathematical Thinking & Reasoning** MTR.1.1, MTR.3.1, MTR.4.1, MTR.5.1

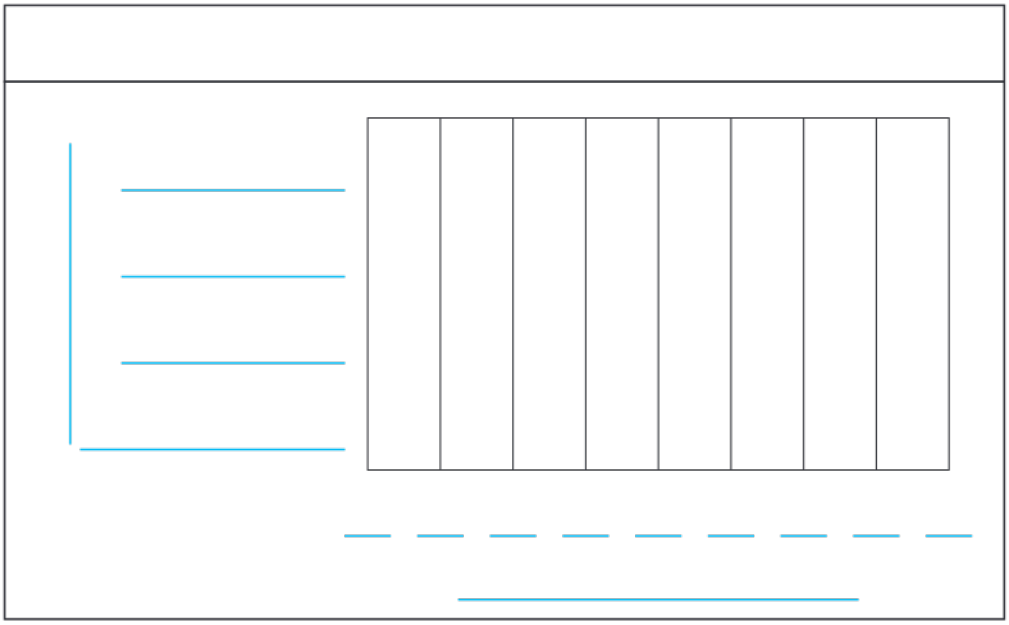
I Can use data displayed in graphs to solve problems.

UNLOCK the Problem Real World

Tarek took a survey of his classmates to find out their favorite summer activity. He recorded the results in the table. Make a bar graph to show the data in the table.

Favorite Summer Activity

Activity	Tally
Biking	𝍸 𝍸 ||
Camping	||||
Swimming	𝍸 𝍸 ||||
Arts & Crafts	𝍸 ||||



1. How many students chose Arts & Crafts or Biking? _____

2. How many fewer students chose Camping than Swimming?

_____

Math Talk

MTR 4.1 Engage in discussions on mathematical thinking.

How can you find how many more students chose Arts & Crafts and Swimming than Biking and Camping?

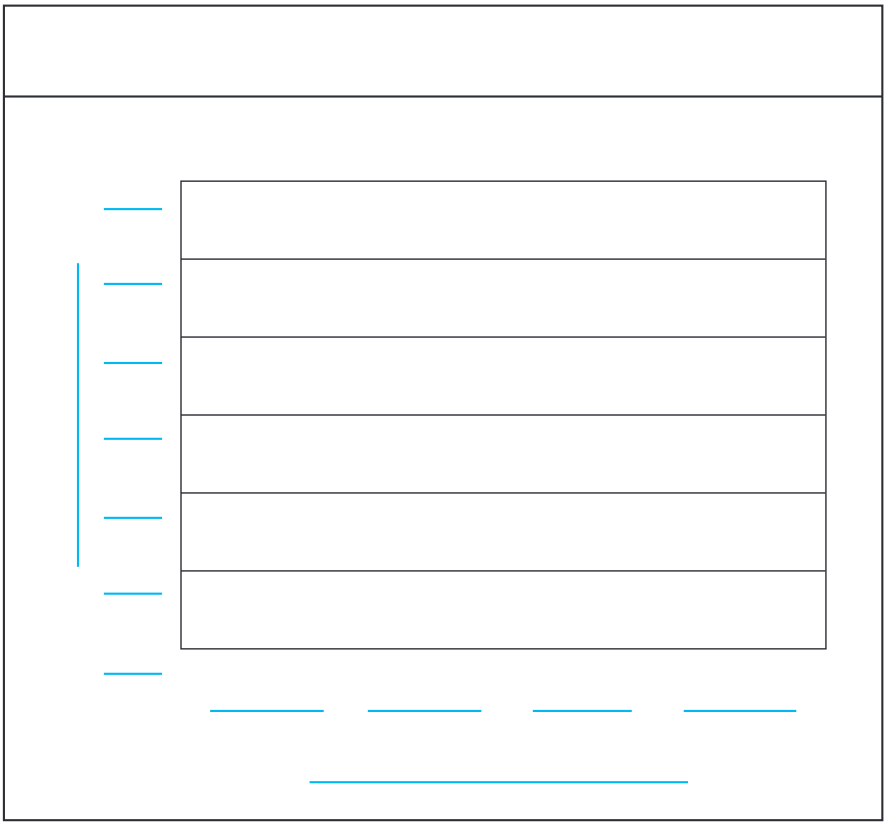
Share and Show

Math Board

Horizon Elementary School is having a walk-a-thon to raise money for new laptops. The table shows the number of miles some students walked. Make a bar graph of the data. Use a scale of

0–_____, and mark the scale by _____.

School Walk-a-Thon	
Students	Number of miles
Axel	10
Matt	5
Ben	2
Sofia	8



Math Talk

TR 5.1 Use patterns or structure.

Explain how the graph would change if Axel and Sofia each walked 4 extra miles.

Use your bar graph for Problems 1–4.

1. Which student walked the most miles? _____

2. How many more miles would Matt have had to walk to equal the number of miles Sofia walked?

_____

3. How many miles in all did the students walk?

_____

4. How many fewer miles did Ben walk than Matt and Sofia together?

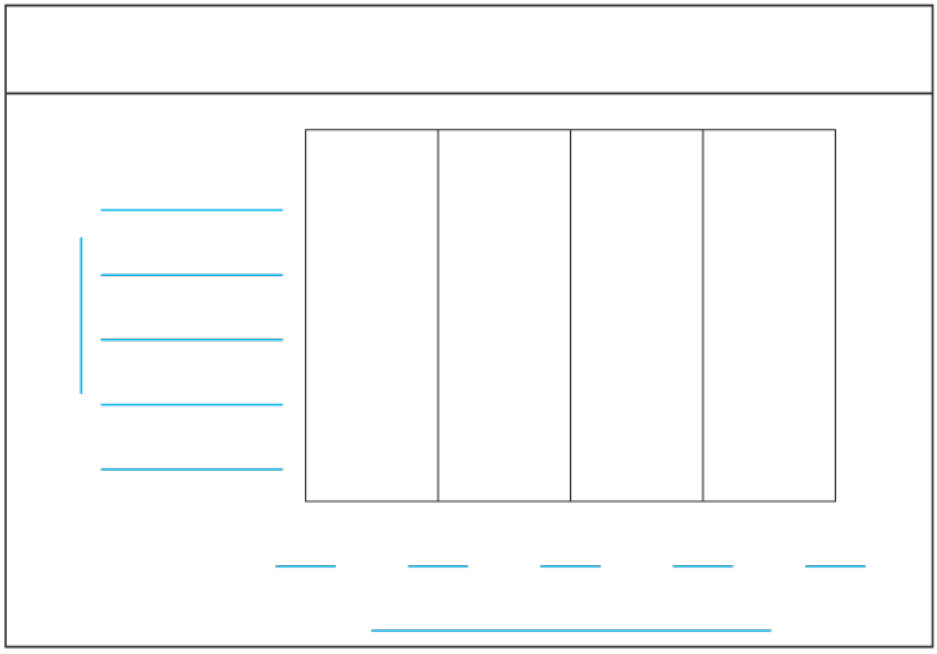
_____

Name _____

On Your Own

5. Members of a book club kept track of how many chapters they each read in one month. Use the data in the pictograph to make a bar graph. Choose numbers so that most of the bars will end on a line.

Chapters Read	
Member	**Number of Chapters**
Nathan	📖
Kara	📖📖📖
Nia	📖📖
Raul	📖📖📖
Marlese	📖
Key: Each 📖 = 10 chapters	



Use your bar graph for 6–9.

6. Which book club member read the most chapters? _____

7. Write and solve a new problem that matches the data in your bar graph.

MATH on the Spot

_____

_____

8. Which book club member read 10 fewer chapters than Raul?

_____

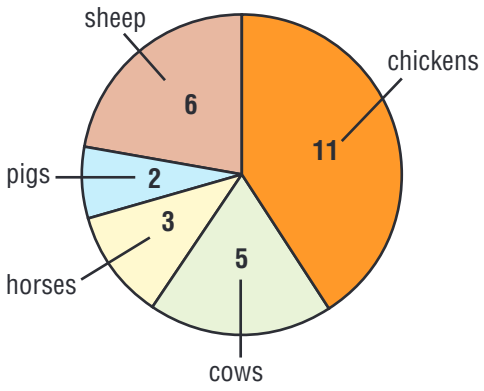
9. What if Nia read 5 more chapters? Then how many chapters in all did the 5 book club members read?

_____

Problem Solving · Applications

Fill in the bubble for the correct answer choice. Use the Farm Animals on Nate's Farm circle graph for problems 10–13.

Farm Animals on Nate's Farm



10. Nate made this circle graph of the farm animals on his farm. How many horses and pigs does Nate have?

- Ⓐ 4
- Ⓑ 3
- Ⓒ 2
- Ⓓ 5

11. How many more chickens and cows are there than sheep?

- Ⓐ 11
- Ⓑ 12
- Ⓒ 9
- Ⓓ 10

12. The total number of horses and pigs Nate has is equal to the number of which other kind of animal?

- Ⓐ chickens
- Ⓑ sheep
- Ⓒ cows
- Ⓓ horses

13. How many farm animals in all are on Nate's farm?

- Ⓐ 21
- Ⓑ 12
- Ⓒ 17
- Ⓓ 27