lesson thirteen - student resource sheet

Lesson Objective: Construct and solve problems, using information from a bar graph.

Vocabulary Box

data — Information that is gathered. Example: Information, or data, can be in the form of numbers, tallies, or quantities.

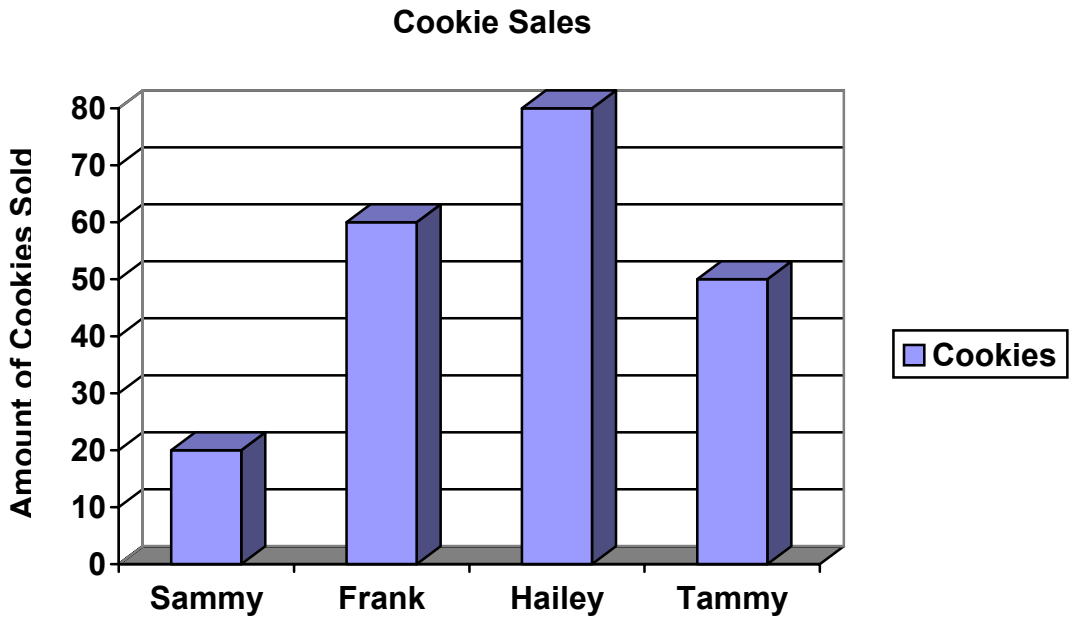
horizontal line — A line that stretches side to side, left to right. Example:

vertical line — A line that stretches up and down, top to bottom. Example:

axis — One of two straight lines that form the borders and define the measurements of the data being organized in a graph. Example:

Guided Practice

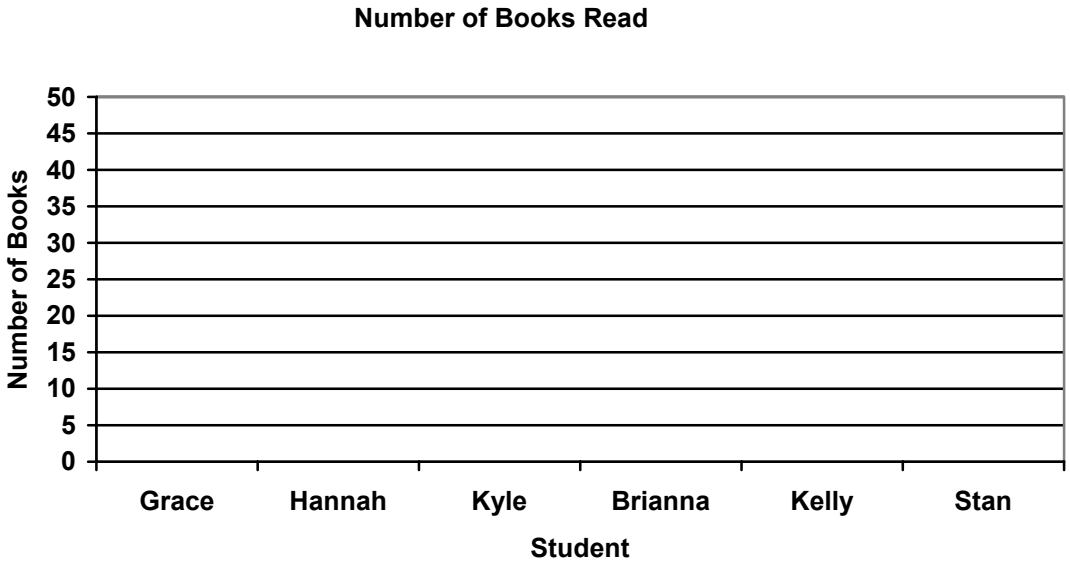
I. Directions: Use the graph below to help answer the questions.



1. How many cookies did Frank sell? _____
2. How many cookies did Hailey sell? _____
3. How many cookies did Sammy sell? _____
4. How many cookies did Tammy sell? _____
5. Who sold the most cookies at the sale? _____
6. Who sold the smallest amount of cookies at the sale? _____
7. How many more cookies did Frank sell than Tammy? _____
8. How many more cookies did Hailey sell than Sammy? _____

II. Directions: Read the following information. With your partner, use this data to create your own bar graph.

Grace, Hannah, Kyle, Brianna, Kelly, and Stan entered a reading contest. They had to read as many books as they could in a month. The one who read the most books was the winner. Grace read 35 books. Hannah read 45. Kyle read 20 books, and Brianna read 30. Kelly read 10 fewer books than Grace, and Stan read 5 more than Hannah.



III. Directions: Answer the following questions based on the bar graph that you and your partner created together. However, work independently on this section.

1. Who read the most books? _____
2. Who read the fewest books? _____
3. How many more books did Hannah read than Grace? _____
4. How many more books would Brianna have to read to be tied with Stan? _____
5. Who came in second place? _____

Summary/Closure

A. Vocabulary Words

Directions: Write your own definition for each vocabulary word.

1. data _____
2. horizontal line _____
3. vertical line _____
4. axis _____

B. Summarize What We Have Learned Today

Directions: Draw your own bar graph and include your own data. Write three questions to solve about the data on your graph. Then, answer your own questions.

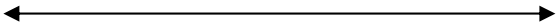
lesson fourteen - student resource sheet

Lesson Objective: You will be able to construct and solve problems using information from a bar graph

Vocabulary Box

data - information that is gathered. For example: data can come in the form of numbers, tallies, or quantities.

horizontal line - a line that stretches side to side, left to right. For example: a horizontal line looks like this:



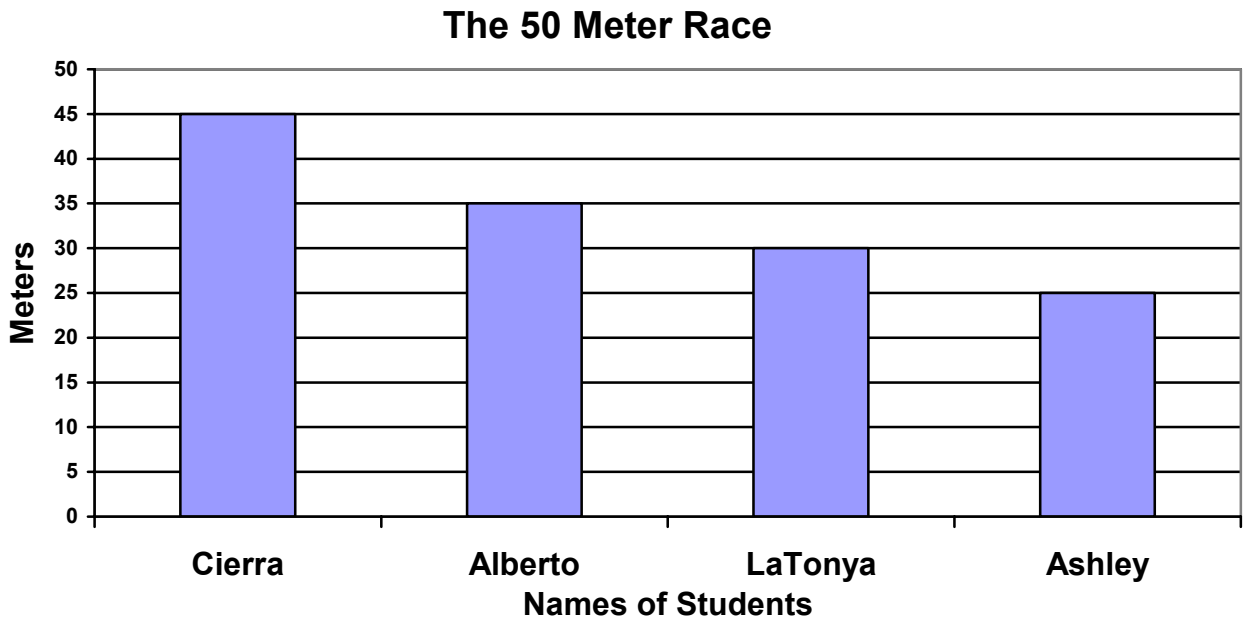
vertical line - a line that stretches top to bottom, up and down. For example: a vertical line looks like this:

axes - straight lines that form the borders and define the measurements of the data being organized in a graph. For example: the axes of a bar graph look similar to these:

Independent Practice

Directions: Use the information below to label and fill in the graph. Then, use the data on the graph to answer the following questions. Show all of your work.

Cierra, Alberto, LaTonya, and Ashley ran a race in gym class. They ran as fast as they could in "The 50 Meter Race." Mr. Stone, the gym teacher, only gave them 30 seconds to run. In 30 seconds, Cierra ran 45 meters, Alberto ran 35 and LaTonya ran five less than Alberto. Ashley ran the least. She ran 20 meters less than Cierra.



1. Who ran the farthest in thirty seconds? _____

2. How much farther did Cierra run than Alberto? _____

3. How far did LaTonya run? _____

4. Who ran farther: LaTonya or Ashley? _____

5. How far did Ashley run? _____

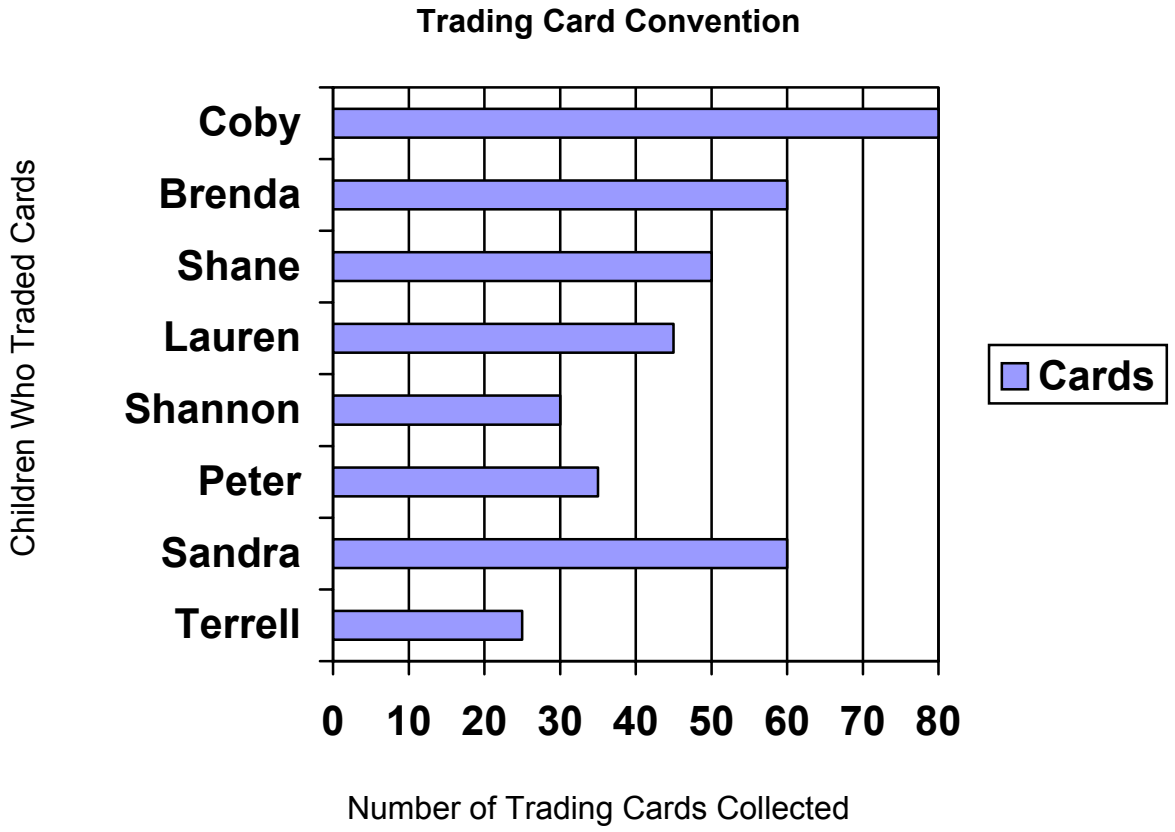
BONUS?

Directions: Use the bar graph above. Solve these problems based on your graph.

1. If we scored Cierra's run and Alberto's run together, how far did they run? _____
2. How far did the children run altogether? _____
3. How much farther did Cierra run than LaTonya? _____

Problem Solving

Every year the Convention Center holds its annual Trading Card Convention. This year, seven children from Mrs. Chapman's class attended the convention. Below is a bar graph showing their accomplishments at the convention.



1. Who were the top three competitors in Mrs. Chapman's class

2. Use what you know about bar graphs and problem-solving to explain how you determined your answer. Use words, numbers, or both in your explanation.

_____

_____

_____

_____

_____

_____

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Directions: Finish this paragraph starter. Include all information you have learned about constructing and solving problems based on a bar graph.

Bar graphs help us organize data. Other uses of a bar graph include

_____

_____

_____

_____

_____

_____

lesson fifteen - student resource sheet

Lesson Objective: Choose and use an appropriate problem-solving strategy.

Guided Practice on Problem Solving Strategies

Directions: Solve each problem with a partner. Keep in mind any strategies you use to help solve the problem. When you're finished, your teacher will review the answers.

1. You buy a piece of candy for 75 cents. List a possible way to make 75 cents using at least one of each of the following: quarters, dimes, nickels, and pennies.

2. There are 30 students riding a bus home from school. At the first stop, six children get off the bus. At the second stop, eight children get off the bus. At the third stop, eleven children get off the bus. How many children are left on the bus?

3. Fill in the missing number: 13, 14, 16, 19, 23, 28, _____, 41.

4. There are 17 people who want to play a game. How many teams of five people could you make? How many people would be left over?

lesson fifteen - student resource sheet

Problem Solving

Directions: Solve each problem on your own. Your teacher will review the answers with you when you've finished.

1. How many tens are in 75?

2. In the number 89,231, which digit is in the ten thousands place?

3. $346 + 428 =$ _____

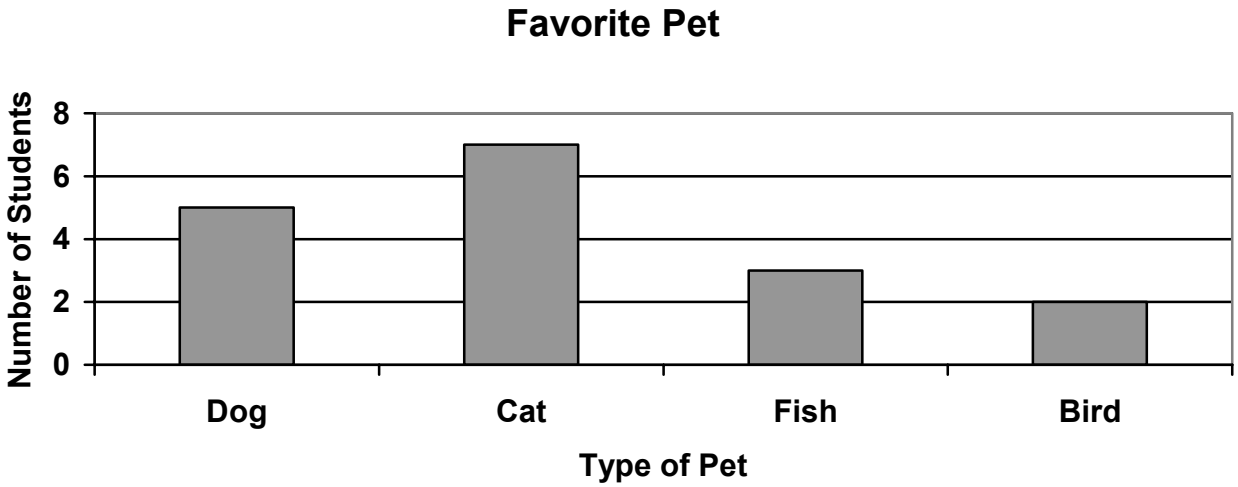
4. $507 - 219 =$ _____

5. $7 \times 8 =$ _____

6. $342 \times 2 =$ _____

7. $4 \times 5 = 20$. What is $20 \div 5$? _____

8. A teacher took a survey to find out which type of pet his students would like to have. According to the graph, how many people said that they liked birds the best?



9. According to the above graph, which pet did the students like best?

10. How many more people have dogs as their favorite pet than birds?