














# Pictographs

Name \_\_\_\_\_



A pictograph uses symbols to show data.



Hours of Soccer Practice	
Month	Tally
April	
May	

Hours of Soccer Practice	
April	    
May	      
Key:  stands for 2 hours.	

1. Use the data from the tally chart at the right to make a pictograph.

Basketball Games at School	
Month	Tally
January	
February	
March	
April	

Basketball Games at School	
January	
February	
March	
April	
Key: Each  stands for 2 games.	

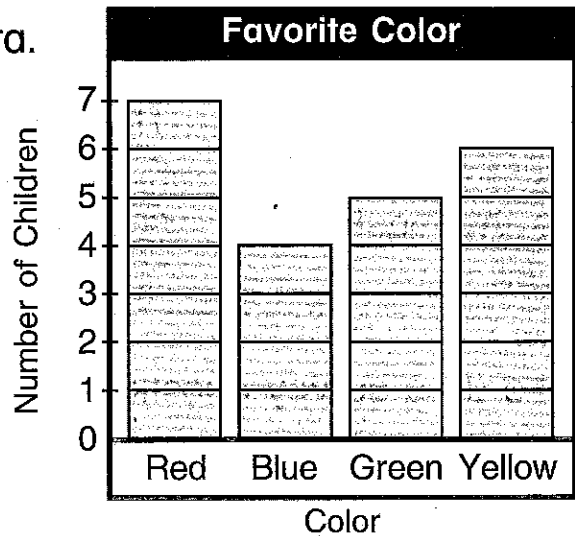
2. Which month had the most basketball games? \_\_\_\_\_
3. How many games were played in January and February? \_\_\_\_\_  \_\_\_\_\_ = \_\_\_\_\_
4. How many more games were played in April than in February? \_\_\_\_\_  \_\_\_\_\_ = \_\_\_\_\_
5. In which month or months did the school play less than 10 games? \_\_\_\_\_

# Bar Graphs

Name \_\_\_\_\_

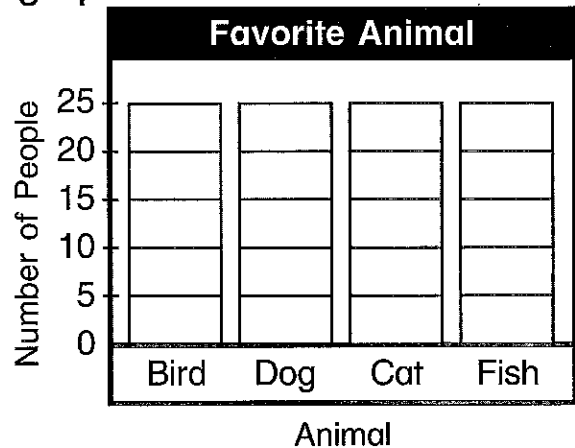
A bar graph uses bars to show data.

Favorite Color	
Color	Tally
Red	
Blue	
Green	
Yellow	



1. Use the tally chart to make a bar graph.

Favorite Animal	
Animal	Tally
Bird	
Dog	
Cat	
Fish	



2. Which animal was favored by the least people?

\_\_\_\_\_

3. Which animal or animals was chosen by more than 10 people?

\_\_\_\_\_

4. How many more people chose fish than birds?

\_\_\_\_\_ ○ \_\_\_\_\_ = \_\_\_\_\_

5. How many people chose birds or fish?

\_\_\_\_\_ ○ \_\_\_\_\_ = \_\_\_\_\_

# Surveys; Range, Mode, and Median; Understand Data

Name \_\_\_\_\_

A survey is a way to collect data by asking a question.

The range is the greatest number minus the least number.

The mode is the number that is seen the most.

The median is the middle number in an ordered set of data.

1. Make up a survey question. Choose from pets, games, or books.  
"How many do you have?"

2. Survey 10 people.  
Record the data in the chart.

Title _____	
	Tally
0	
1	
2	
3	
4	
More than 4	

3. Make a bar graph from the data above on a separate sheet of paper.
4. What is the range of the data? \_\_\_\_\_
5. What is the mode of the data? \_\_\_\_\_
6. What is the median of the data? \_\_\_\_\_
7. Make a prediction. Of the next 10 people you ask,  
the most will have \_\_\_\_\_.

# Compare Data

Name \_\_\_\_\_

Mr. Moore's Class		Mr. Rivera's Class	
	Favorite Sport		Favorite Sport
Football		Football	
Baseball		Baseball	
Soccer		Soccer	
Basketball		Basketball	

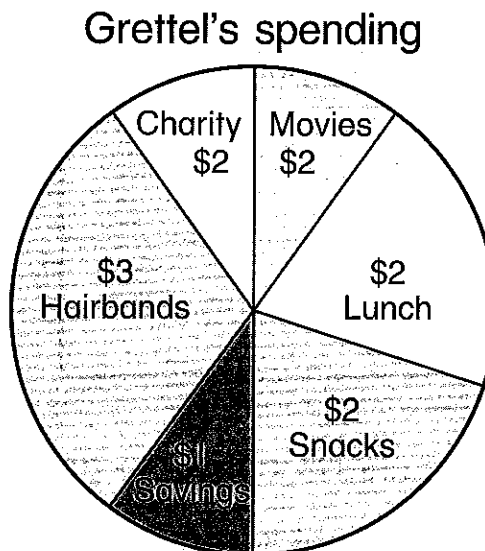
Use both tally charts above to answer the questions.

- How many more children chose basketball in Mr. Rivera's class than in Mr. Moore's class? \_\_\_\_\_ more children
- How many fewer children chose baseball in Mr. Rivera's class than in Mr. Moore's class? \_\_\_\_\_ fewer children
- How many fewer children in Mr. Moore's class like football than soccer? \_\_\_\_\_ children
- How many children chose soccer in both Mr. Moore's and Mr. Rivera's class? \_\_\_\_\_ children
- How many children in Mr. Rivera's class like soccer or football? \_\_\_\_\_ children
- How many children in both classes chose football? \_\_\_\_\_ children
- How many fewer children in Mr. Rivera's class like baseball than basketball? \_\_\_\_\_ children
- What sport was the favorite of the most students in both classes? \_\_\_\_\_

# Circle Graphs

Name \_\_\_\_\_

Grettel gets \$12 allowance a week. This circle graph shows how Grettel spends her allowance.



Use the graph above to answer the questions.

1. What does Grettel spend the most money on? \_\_\_\_\_

2. How much does Grettel spend on lunch and snacks?

\_\_\_\_\_ ○ \_\_\_\_\_ = \_\_\_\_\_

3. How much does Grettel save each week?

\_\_\_\_\_

4. On what does Grettel spend the least?

\_\_\_\_\_

5. How much more does Grettel spend on hairbands than on lunch?

\_\_\_\_\_ ○ \_\_\_\_\_ = \_\_\_\_\_

6. How much does Grettel give to charity?

\_\_\_\_\_

7. If the data in this circle graph was put on a bar graph, how many bars would there be?

\_\_\_\_\_

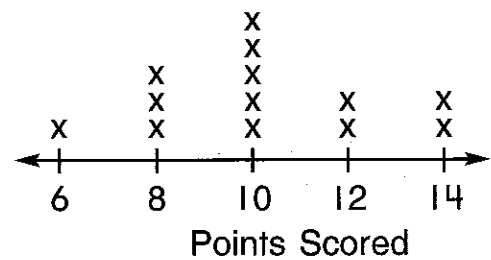
8. Which bar would be the longest?

\_\_\_\_\_

# Line Plots

Name \_\_\_\_\_

This line plot shows the number of points scored by the Hilltown soccer team in each game last season.



Use the line plot above to answer the questions.

1. How many games did the Hilltown soccer team play?

\_\_\_\_\_

2. What was the least number of points the soccer team scored?

\_\_\_\_\_

3. What was the greatest number of points scored in a soccer game?

\_\_\_\_\_

4. In how many games did the team score 8 points?

\_\_\_\_\_

5. What was the number of points scored most often?

\_\_\_\_\_

6. What was the range of points scored by the team?

\_\_\_\_\_

7. In how many games did the soccer team score between 10 and 14 points?

\_\_\_\_\_

8. What is the mode of the points scored?

\_\_\_\_\_

9. In how many games did the team score fewer than 10 points?

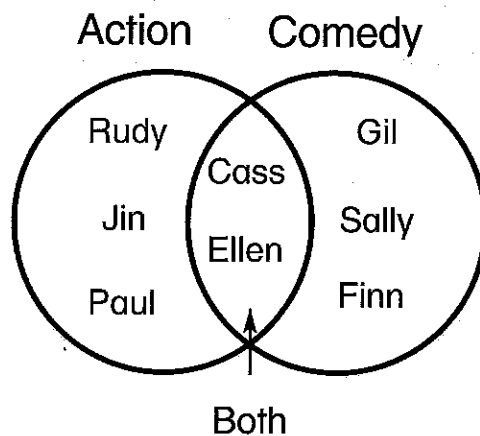
\_\_\_\_\_

# Venn Diagrams

Name \_\_\_\_\_

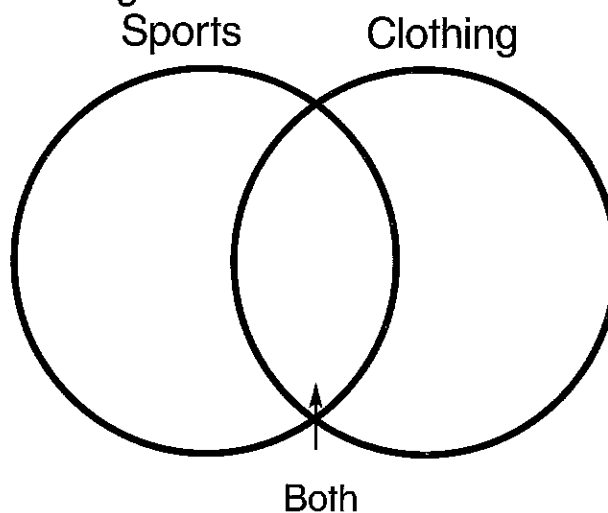
Venn diagrams show when data is shared.

What kind of movies do you like?	
Type of Movie	Names
Action	Rudy, <u>Cass</u> , Jin, <u>Ellen</u> , Paul
Comedy	<u>Cass</u> , Gil, Sally, <u>Ellen</u> , Finn



1. Use the data below to make a Venn diagram.

What type of store do you like?	
Type of Store	Names
Sports	Amy, <u>Beth</u> , Ian, Steven, <u>Jeff</u>
Clothing	Scott, Jay, <u>Jeff</u> , <u>Beth</u> , Irene



2. Which of the children like only sports stores?

\_\_\_\_\_

3. Which of the children like only clothing stores?

\_\_\_\_\_

4. Which of the children like both sports stores and clothing stores?

\_\_\_\_\_

5. How many children were surveyed in all? \_\_\_\_\_ children

# Problem-Solving Strategy: Use a Graph

Name \_\_\_\_\_

**Read**

Pia wants to have as many glasses as plates for her party. How many more glasses does she need?

**Plan**

Use the graph to find how many glasses and plates. Write a number sentence.

**Write**

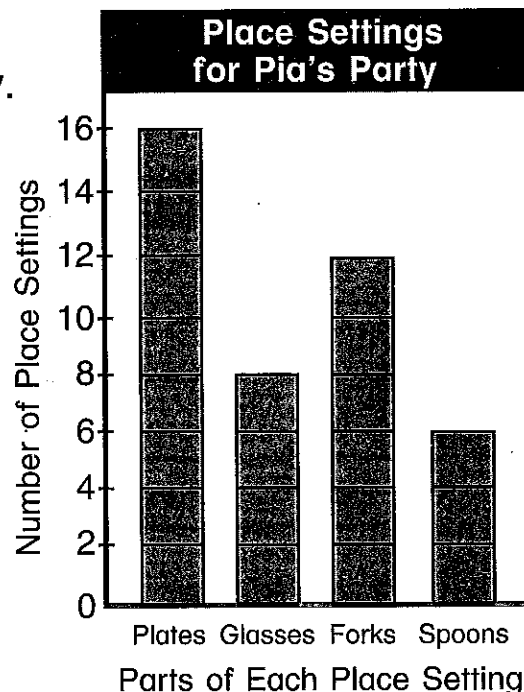
16 - 8 = 8

Pia needs 8 more glasses.

**Check**

Use a related addition fact to check.

$$8 + 8 = 16$$



Use the graph to answer the questions.

1. If Gina brings four glasses to the party, how many glasses will there be in all?



There will be \_\_\_\_\_ glasses in all.

2. How many more spoons does Pia need to have the same number of spoons and forks?



Pia needs \_\_\_\_\_ more spoons.

3. Pia buys some balloons. She has twice as many balloons as spoons. How many balloons does Pia buy?



Pia buys \_\_\_\_\_ balloons.



# Problem-Solving Applications: Mixed Strategies

Name \_\_\_\_\_














**Read**

**Plan**

**Write**

**Check**

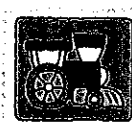
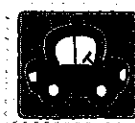
Use a strategy you have learned.

Geri's Sticker Collection				
				
				
				
Key: Each  stands for 3 stickers.				

## Strategy File

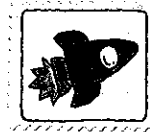
Choose the Operation  
Use Logical Reasoning  
Use a Graph

1. Circle the sticker that Geri has the most of.



2. How many more rocket stickers than car stickers does Geri have?

Geri has \_\_\_\_\_ more rocket stickers.



3. How many train stickers does Geri have?

Geri has \_\_\_\_\_ train stickers.



4. Jason thinks of an even number between 63 and 69. It has more tens than ones. What is the number?

\_\_\_\_\_



5. Ami counts her key chains. She has between 13 and 19. You say the number when you count by 4s from zero. How many key chains does Ami have?

Ami has \_\_\_\_\_ key chains.

