Survey Time

Margo asked 20 classmates about their favorite
wild animals. Use the clues to complete the chart.

Favorite Wild Animals	
Animal	**Tally**
zebra	
lion	
giraffe	
elephant	ⱧⱧ I

1. One more classmate chose zebra than
elephant. Draw tally marks for zebra.

_____

2. One fewer classmate chose lion than
elephant. Draw tally marks for lion.

_____

3. The other classmates chose giraffe.
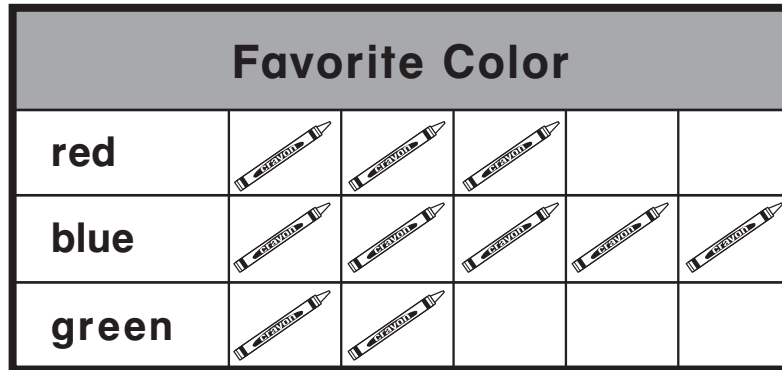Draw tally marks for giraffe.

Writing and Reasoning Explain how you found
the number of tally marks for giraffe.

_____

_____

_____

Read Picture Graphs

A picture graph uses pictures to show information.

Favorite Color					
red	✏	✏	✏		
blue	✏	✏	✏	✏	✏
green	✏	✏			

Key: Each ✏ stands for 1 child.

The row with ___blue___ has 5 pictures.

So, ___5___ children chose blue.

Use the picture graph to answer the questions.

1. How many children chose red? _____ children

2. Did more children choose green
or choose red? _____

3. Which color was chosen by
the most children? _____

4. How many children in all chose
a favorite color? _____ children

Favorite Fruit

Jake asked his classmates to choose their favorite fruit.
He used a key of 2 for his picture graph.

Favorite Fruit						
apple	☺	☺	☺			
banana	☺	☺	☺	☺	☺	☺
orange	☺	☺	☺	☺		
watermelon	☺	☺	☺	☺	☺	

Key: Each ☺ stands for 2 children.

1. How many children chose apple?   _____ children

_____

2. Which fruit was chosen by the most children?   _____

_____

3. How many children in all chose
   banana or chose orange?   _____ children

Writing and Reasoning Explain how you
solved Exercise 3.

_____

_____

Make Picture Graphs

This picture graph uses 1 picture for each animal.
Draw a △ for each tally mark.

Animals at the Pet Store	
Animal	**Tally**
fish	IIII
hamster	II
turtle	III

Animals at the Pet Store					
fish	△	△	△	△	
hamster	△	△			
turtle	△	△	△		

Key: Each △ stands for 1 animal.

How many turtles are at the pet store? __3__ turtles

1. Use the tally chart to complete the picture graph.
   Draw a ☺ for each child.

Favorite Color	
Color	**Tally**
pink	‖‖‖
yellow	III
blue	‖‖‖

Favorite Color					
pink	☺	☺	☺	☺	☺
yellow					
blue					

Key: Each ☺ stands for 1 child.

2. Which color did the fewest children choose? _____

3. How many children chose pink? _____ children

4. How many more children chose blue
   than chose yellow? _____ more children

A Lot of Pets

Lily asked her classmates to
choose their favorite pet.

- Seven classmates chose cat.

- Three fewer classmates chose dog than cat.

- Six classmates chose fish.

- Three fewer classmates chose rabbit than fish.

1. Use the clues to complete the
   picture graph for Lily's survey.

Favorite Pet							
cat							
dog							
fish							
rabbit							

Key: Each ☺ stands for 1 child.

2. How many classmates in all
   answered the survey? _____ classmates

Writing and Reasoning How many classmates
chose a pet that was not a cat? Explain.

_____

_____

_____

Read Bar Graphs

Look at the number below the right end of each bar.

This number tells how many of each model Max has.

Max's Model Collection

Model									
planes									
cars									
boats									

0 1 2 3 4 5 6 7 8

Number of Models
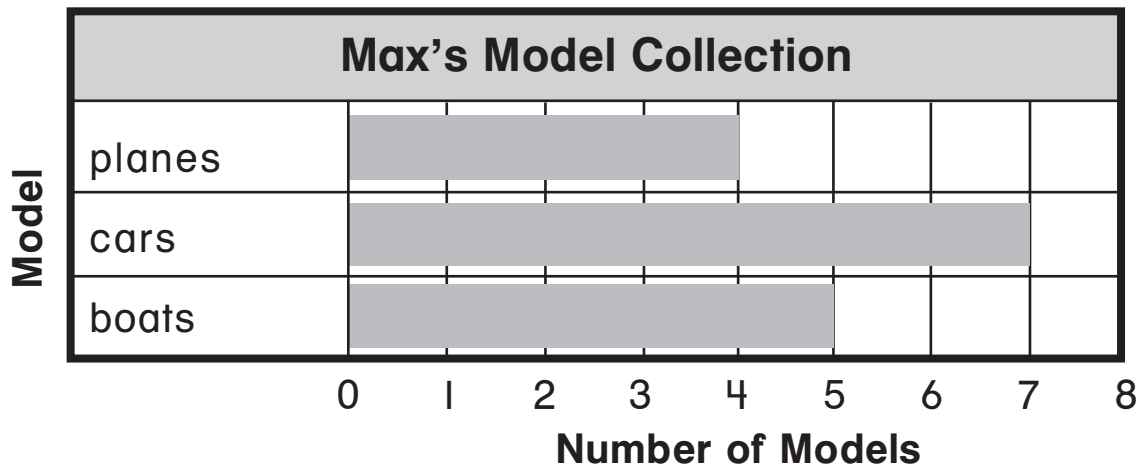
The bar for model cars ends at 7.

So, Max has ___*7*___ car models.

Use the bar graph.

1. How many model planes does Max have?   _____ model planes

_____

2. Does Max have more model boats
or model planes?   more model _____

_____

3. How many models does Max have in all?   _____ models

Money in the Bank

Cole has these coins in his coin bank.

Money in Cole's Coin Bank						
Quarters						
Dimes						
Nickels						
Pennies						

Coins

0   1   2   3   4   5   6

Number of Coins
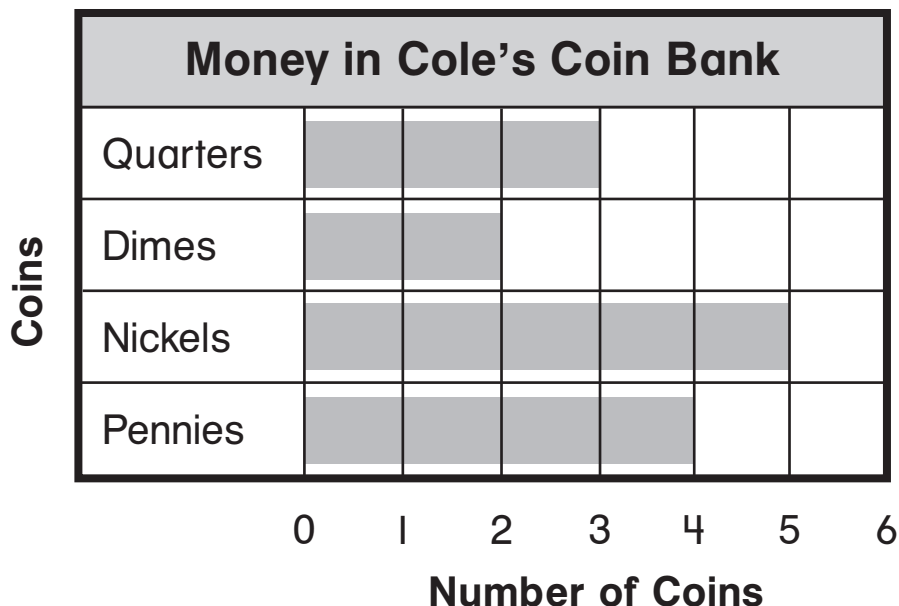
1. How many coins in all are in
Cole's coin bank? _____ coins

2. What is the total value of the dimes
in Cole's bank? _____

3. Do all the dimes or all the nickels
have a greater total value? _____

Writing and Reasoning How did you find
the answer to Exercise 3?

_____

_____

Make Bar Graphs

This bar graph shows how many games Alex, Sarah, and Tony played.

- Alex played 5 games.
- Sarah played 3 games.
- Tony played 4 games.

Games Played

Number of Games

Alex   Sarah   Tony
Children
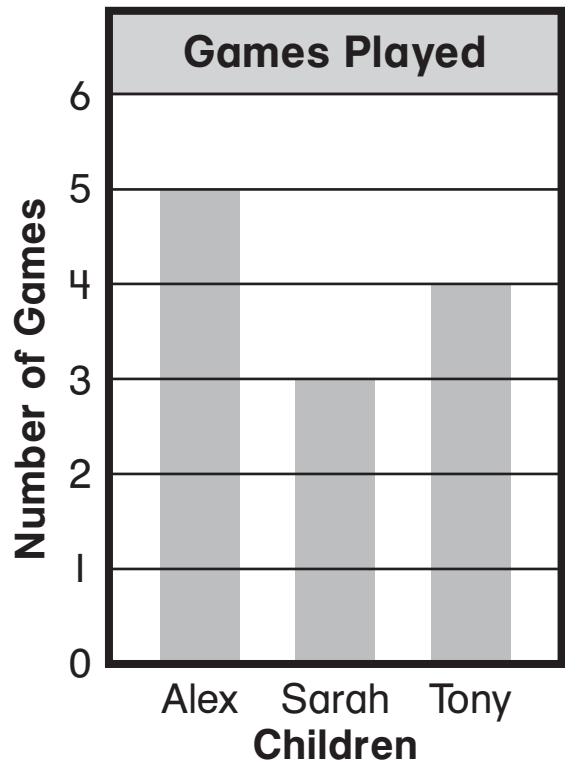
Jim is making a bar graph to show the number of markers his friends have.

- Adam has 4 markers.
- Clint has 3 markers.
- Erin has 2 markers.

1. Trace the labels for the graph.

2. Draw bars in the graph to show the number of markers that Clint and Erin have.

Our Markers

Number of Markers

Adam   Clint   Erin
Friends
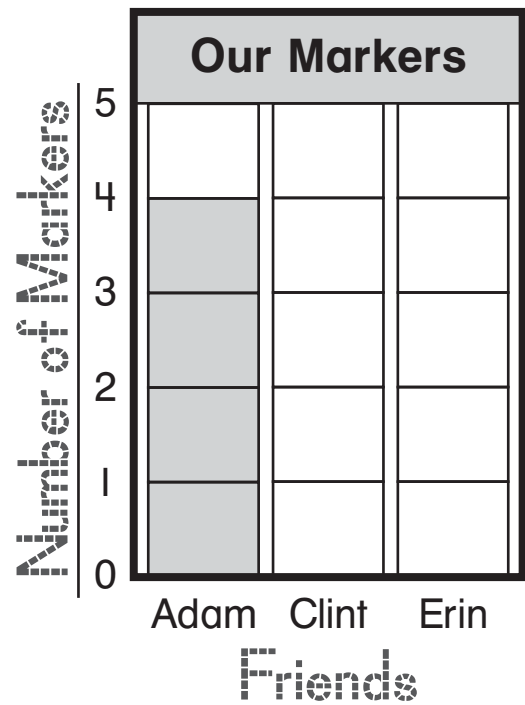
A Lot of Squares

Nina drew some squares.
She wrote letters in the squares.

A		D			A		B
	C		D	C		D	A
			D		A		
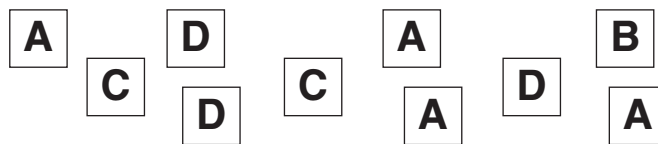
1. Draw bars in the graph to show the number of each kind of letter square Nina drew.

2. How many letter squares did Nina draw that were not vowels?

_____ letter squares

Nina's Squares

Letter

A					
B					
C					
D					
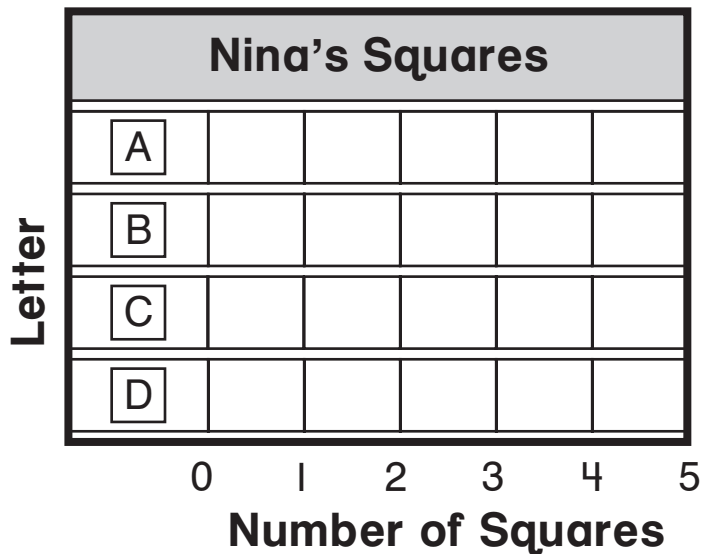
0   1   2   3   4   5
Number of Squares

3. Write a question you can answer by using the data in the graph. Ask a classmate to answer your question.

_____

_____

_____

Writing and Reasoning How did you know how long to draw the bars for each kind of square?

_____

_____

Problem Solving • Display Data

The list shows how many hours
Morgan worked on her project.
Describe how the number of hours
changed from Week 1 to Week 4.

Week 1	1 hour
Week 2	2 hours
Week 3	3 hours
Week 4	4 hours

Unlock the Problem

What do I need to find?	**What information do I need to use?**
how the number of _hours_ changed from Week 1 to Week 4	the number of _hours_ Morgan worked on her project each week

Show how to solve the problem.

Hours Worked on Project

Number of hours	Week 1	Week 2	Week 3	Week 4
5				
4				
3				
2		■		
1	■			
0				

Week

The number of hours _____

_____
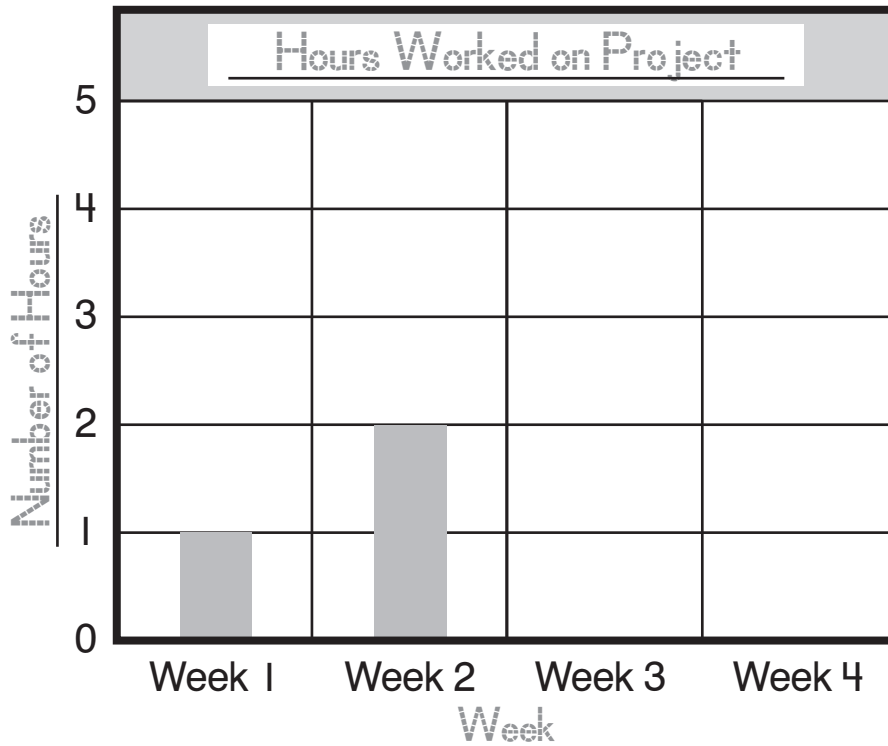
In the Garden

Make a bar graph to solve.

Week 1	3 hours
Week 2	4 hours
Week 3	6 hours
Week 4	5 hours

1. Mr. Adams made a list of the hours he spent gardening in June. Describe how the number of hours changed from Week 1 to Week 4.

```
7 |                                        |
6 |                                        |
5 |                                        |
4 |                                        |
3 |                                        |
2 |                                        |
1 |                                        |
0 |_____|
    Week 1    Week 2    Week 3    Week 4
```

_____
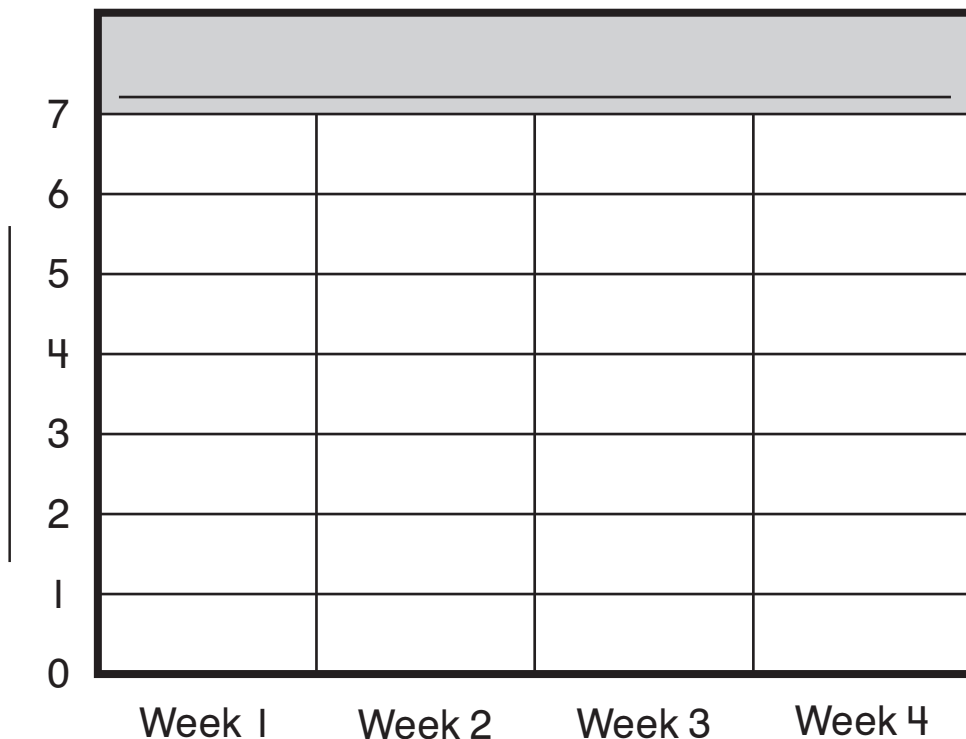
The number of hours _____

Writing and Reasoning Suppose Mr. Adams spends 7 hours gardening in Week 5. How would the number of hours change from Week 1 to Week 5? Explain.

_____

_____