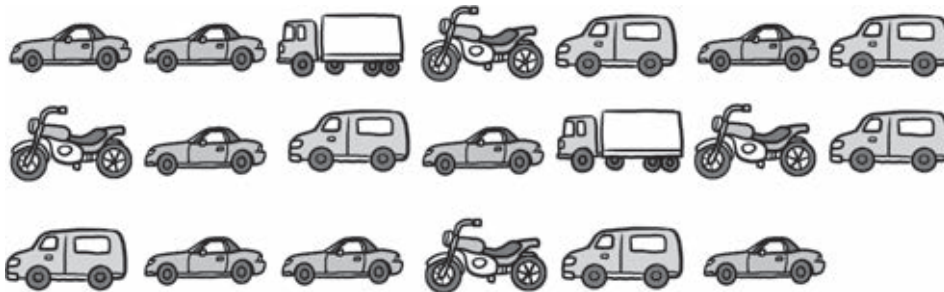


Chapter
4

Tables and Line Graphs

Practice 1 Making and Interpreting a Table

These are the vehicles that passed through a town center between 10:00 A.M. and 10:15 A.M. last Sunday.



Make tally marks to count the number of each type of vehicle that passed through the town center.

Example

Number of cars



1. Number of motorcycles _____
2. Number of vans _____
3. Number of trucks _____

Tally marks are used to organize data in groups of 5.



Using the data above, complete the table.

4. Vehicles that Passed Through the Town Center

Type of Vehicle	Car	Motorcycle	Van	Truck
Number of Vehicles	8			

The school nurse keeps the health records of all the students. These cards show the height and weight of nine students.

Name: Pablo
Height: 62 in.
Weight: 114 lb

Name: Grant
Height: 59 in.
Weight: 110 lb

Name: Tamara
Height: 55 in.
Weight: 103 lb

Name: John
Height: 55 in.
Weight: 114 lb

Name: Mei Li
Height: 59 in.
Weight: 103 lb

Name: Pauline
Height: 62 in.
Weight: 92 lb

Name: Nita
Height: 55 in.
Weight: 103 lb

Name: Evan
Height: 51 in.
Weight: 84 lb

Name: Samantha
Height: 55 in.
Weight: 92 lb

Complete. Use the data on the cards.

5. Height of Students

Height (in.)	Number of Students
51	
	4
	2
62	

Weight of Students

Weight (lb)	Number of Students
84	1
92	
	3
110	
	2

Jane used tally marks to record the number of pets adopted from an animal shelter in a week.

Pets Adopted from an Animal Shelter

Pet	Tally
Guinea Pigs	###
Hamsters	### ### ###
White Mice	### ### ###
Rabbits	###

Complete. Use the data in the tally chart.

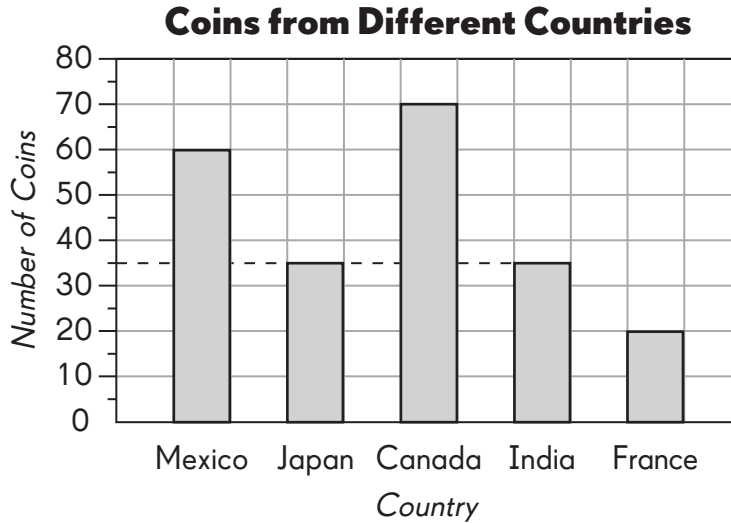
6. Pets Adopted from an Animal Shelter

Pet	Number of Pets Adopted
Guinea Pigs	
Hamsters	
White Mice	
Rabbits	

Complete. Use the data in the table.

7. _____ white mice were adopted.
8. _____ guinea pigs were adopted.
9. _____ more white mice than guinea pigs were adopted.
10. Three times as many _____ as _____ were adopted.
11. The pets that were adopted most often from the animal shelter were _____.

Gary has a coin collection. The bar graph shows the number of coins he collected from different countries.



Use the data in the graph to complete the table. Then use the data in the table to complete the sentences.

12. Coins from Different Countries








Country	Number of Coins
Mexico	
Japan	
Canada	
India	
France	

- 13.** Gary has the same number of coins from _____ and _____.
- 14.** Gary has half as many coins from Japan as he has from _____.
- 15.** He has _____ more coins from Mexico than from India.
- 16.** Gary gave away all his coins from Canada. He now has the greatest number of coins from _____.

Practice 2 Using a Table


Use the data in the table to complete the sentences below.

The table shows pictures at rows, columns, and intersections.

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Row A						
Row B						
Row C						
Row D						
Row E						

Example


 is at the intersection of Row B and Column 3.

 is in Row B and Column 3.

1. _____ is at the intersection of Row E and Column 1.

2.  is in Row _____ and Column _____.

3.  is in Row _____ and Column _____.

4.  is in Row _____ and Column _____.

The table shows part of Bill's class schedule from Monday through Wednesday.

Bill's Schedule

Time	Monday	Tuesday	Wednesday
09:00 A.M. – 10:00 A.M.	Science	Math	History
10:00 A.M. – 11:00 A.M.	Math	Geography	Science
11:00 A.M. – 12:00 P.M.	English	Science	Math
12:00 P.M. – 1:00 P.M.	Lunch	Lunch	Lunch

Use the table to answer the questions.

5. What class does Bill have between 10:00 A.M. and 11:00 A.M. on Mondays? _____

6. What class does Bill have between 9:00 A.M. and 10:00 A.M. on Wednesdays? _____

7. His lunch break on Wednesday is between _____.

8. His Math class on _____ is between 11:00 A.M. and 12:00 P.M.

9. His Geography class on _____ is between 10:00 A.M. and 11:00 A.M.

Name: _____

Date: _____

Maria and Vinny collected stamps from three different countries: Singapore, Malaysia, and Thailand. The number of stamps collected is shown in the table below.

Stamps Collected

Collector	Singapore	Malaysia	Thailand
Maria	15		23
Vinny		18	
Total	46	60	52

Complete the table, and answer the questions.

10. How many Thailand stamps did Vinny collect? _____
11. How many Thailand stamps did Maria and Vinny collect altogether? _____
12. How many more Malaysia stamps than Singapore stamps did Maria and Vinny collect altogether? _____
13. Who collected more stamps: Maria or Vinny? _____
14. How many stamps did they collect altogether? _____

The table shows the number of quarters and nickels that five students saved.

Quarters and Nickels Saved

Name	Quarters (25¢)		Nickels (5¢)		Total Amount Saved (\$)
	Number of Coins Collected	Amount Saved (\$)	Number of Coins Collected	Amount Saved (\$)	
Amy	16		20		
Bernard	10		7		
Chin	18		25		
Dawn	21		9		
Ernest	15		15		

Complete the table, and answer the questions.

15. Who saved the greatest amount? _____
16. Who saved the least amount? _____
17. How many more coins did Chin collect than Ernest? _____
18. How much more must Bernard save in order to have the same amount as Dawn? _____
19. Which two students saved a total of less than \$7.50?
How much less?

20. Which two students collected the same number of coins?

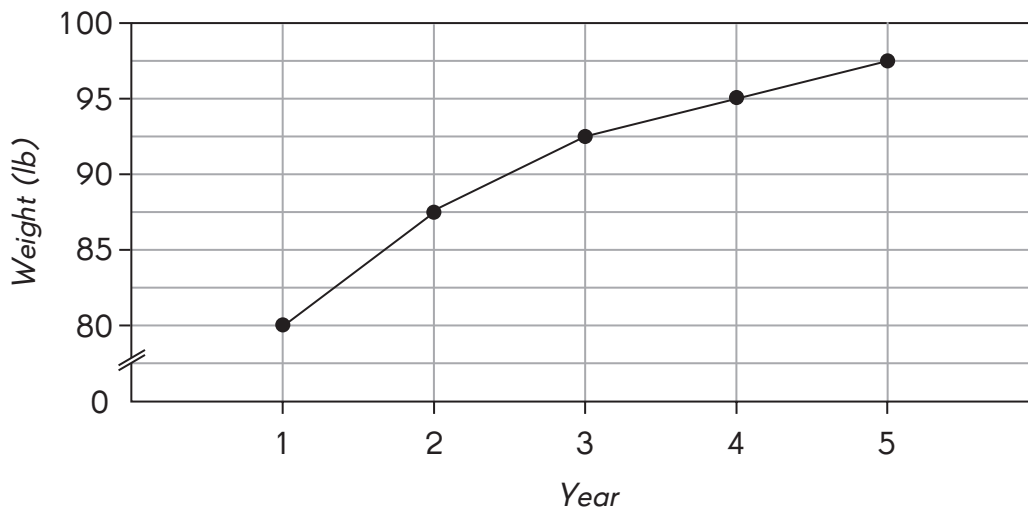
21. Of the two students in **Exercise 20**, who saved more money?
How much more?

Practice 3 Line Graphs

Use the data in the line graphs to answer each question.

The line graph shows the change in Rodney's weight over a few years.

Change in Rodney's Weight



Example

What was Rodney's weight in the second year?

87.5 lb

In which year was the increase in Rodney's weight the

greatest? Between the first and second year

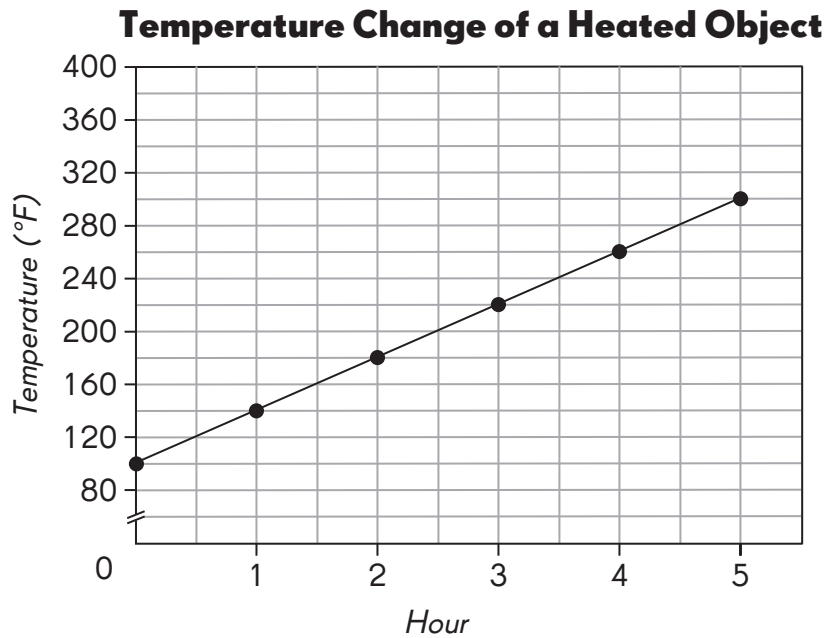
A line graph shows how data changes over time.



1. What was Rodney's weight in the
 - a. fourth year? _____
 - b. fifth year? _____
 - c. What was the increase in Rodney's weight between these two years? _____

2. In which year was the increase in Rodney's weight 5 lb?

The line graph shows the temperature of an object being heated over five hours.



3. What was the temperature of the object in the second hour? _____
4. What was the temperature of the object in the fourth hour? _____
5. What was the increase in temperature between the second hour and the fourth hour? _____

Use the data from the graph to complete the table.

Temperature Change of a Heated Object

Time (h)	0	1	2	3	4	5
Temperature (°F)	100				260	

7. Did the temperature increase by the same amount every hour?

The line graph shows the change in height while Ali was climbing a mountain.



8. At what time was Ali at a height of 200 meters? _____
9. At what height was Ali at 2 P.M.? _____
10. During which hour was the increase in height the greatest?

11. When did Ali take a break from climbing? _____
12. Explain what happened from 1 P.M. to 2 P.M.

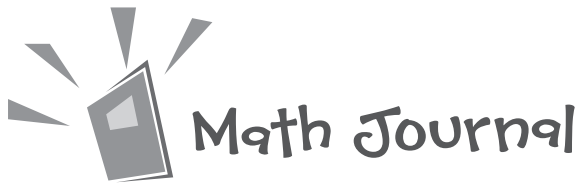
Choose an appropriate graph to display the data. Write *bar graph*, *line graph*, or *picture graph*. Explain your choice.

- 13.** Anna recorded the rainfall amounts (in centimeters) in each month from January to June.

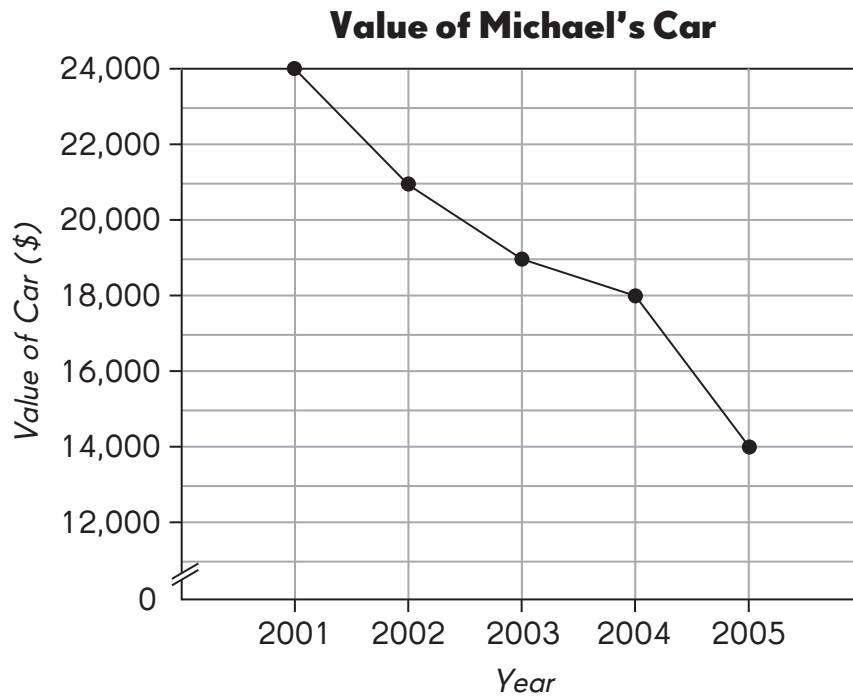
- 14.** Jim organized a party for 20 of his friends. He recorded the number of friends who liked each flavor of ice-cream — vanilla, strawberry, and chocolate. 4 friends liked vanilla ice-cream, 8 friends liked strawberry ice-cream, and 8 friends liked chocolate ice-cream.

- 15.** Temperature change of water (in °F) when it is heated over 20 minutes.

- 16.** Level of water remaining in a leaking tank recorded over four hours.



Michael bought a new car in 2001 for \$24,000. The line graph shows how the value of his car changed from 2001 to 2005.



Write four questions that can be answered using the data in the line graph. Then write the answers.

a. Question

Answer

b. Question

Answer

c. Question

Answer

d. Question

Answer

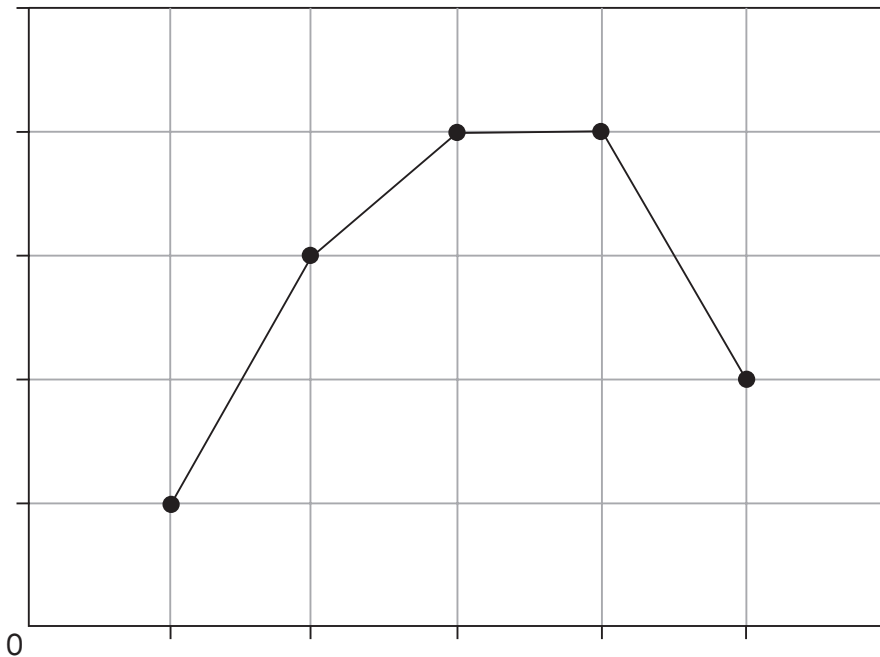


Put On Your Thinking Cap!



Challenging Practice

Look at the line graph.

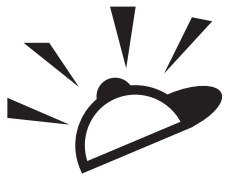


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1. Suggest what data this graph could be showing.

2. Create a title, scale and labels for the graph. Show these on the graph.

3. Why do you think the line is horizontal from point 3 to point 4?

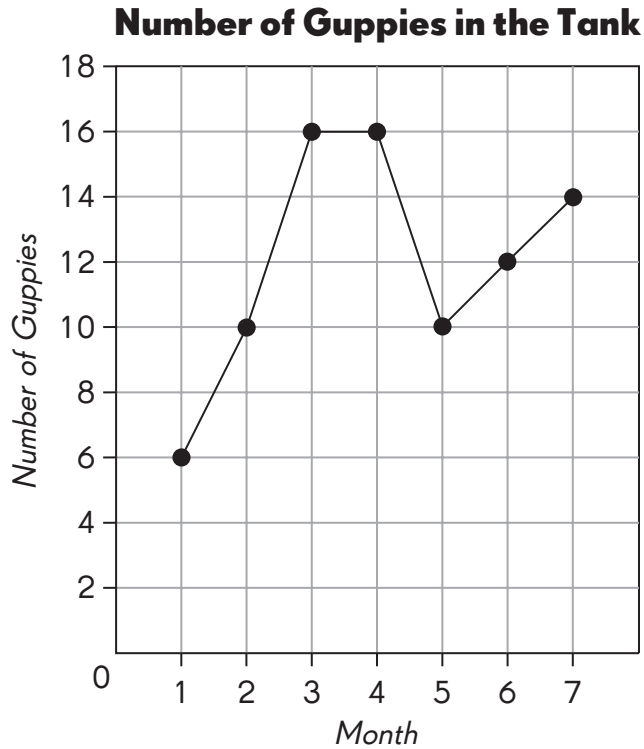


Put On Your Thinking Cap!



Problem Solving

The graph shows the number of guppies in a tank over a few months.



1. During which 1-month interval was the increase in the number of guppies the greatest? _____
2. How many guppies were moved to another tank between the fourth and the fifth month? _____
3. How many guppies were added to the tank in the second month? _____
4. Why is the line horizontal from the third to the fourth month?

