


6 - 1

Tables and Bar Graphs

Data Organization

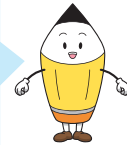
Example 1 The table below summarizes the results of a class survey to find the best three favorite sweets which teacher will give it as a prize. Find the number of people who voted by using tally marks.

Chocolate	Chocolate	Candy	Chocolate
Gum	Candy	Gum	Gum
Candy	Chocolate	Candy	Ice cream
Gum	Chocolate	Biscuits	Candy
Chocolate	Gum	Chocolate	Pudding

Chocolate	//// //
Candy	////
Gum	////
Biscuits	/ 
Ice cream	/
Pudding	/

This is a way of tally

- 1 people /
- 2 people //
- 3 people ///
- 4 people ////
- 5 people ////



1 The table below summarizes the results of a class survey to find the best three favorite colours to buy color paper for an art class. Find the number of people who were surveyed by using tally marks.

Orange	Orange	Blue	Blue	Brown
Blue	Orange	Red	Orange	Red
Red	Green	Blue	Red	
Blue	Blue	Orange	Red	
Blue	Orange	Purple	Orange	

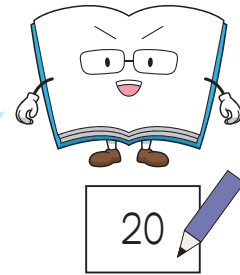
Red	
Blue	
Orange	
Green	
Purple	
Brown	

Example 2 Convert the tally in Example 1 into numerals and sort out the numbers in the table below.

Favorite sweets	Chocolate	Candy	Gum	Other
Number of people	7	5	5	3

Sort out in descending order (from many to few) from the left to see what the best is.

Small numbers of votes comparing to the best three items are summed up as "Other". Put "Other" last.



How many votes were there collected in total?

2 Convert the tally in Problem 1 into numerals and sort out the numbers in the table below. Small numbers of votes comparing to the best three items are summed up as "Other" and put "Other" last.

Favorite colors					Total
Number of people					

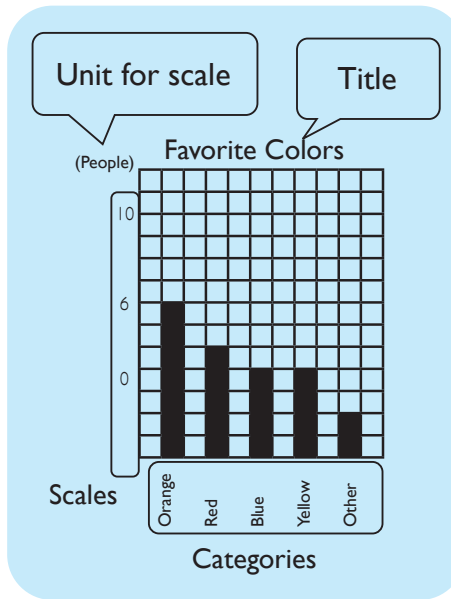
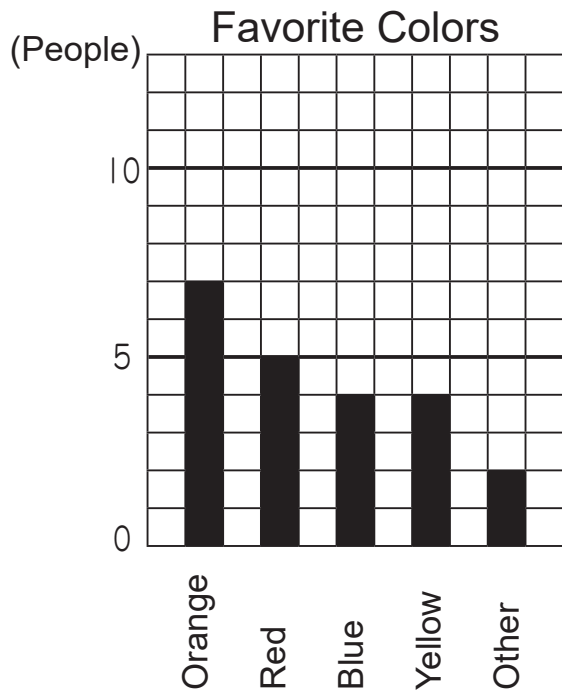
3 The tally shows the result of a class survey on the best three favorite drinks into numerals. Sort out the numbers in the table below. Small numbers of votes comparing to the best three items are summed up as "Other" and put "Other" last.

Water	//// /
Juice	//// ///
Tea	//
Soda	//// ////
Coffee	//
Milk	//

Favorite drinks					Total
Number of people					

Bar Graphs (1)

Example 1 A boy created the graph by surveying his classmates about the best favorite colors.



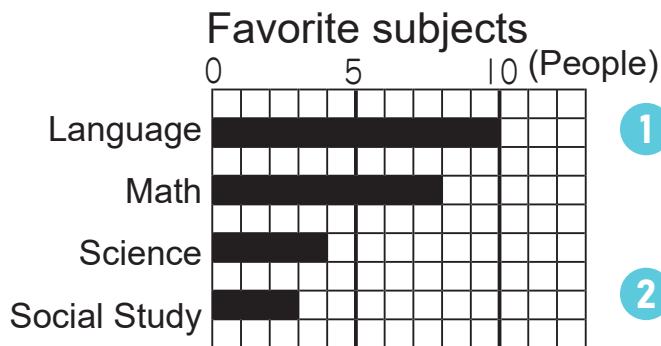
1 What is the best favorite colour?

Orange

2 What is the difference between the number of classmates who like the best favorite colour and the second best favorite colour?

2 people

1 A teacher created the graph by surveying her classmates about their favorite subjects to think of organizing extra classes.



1 How many people like math class?

people

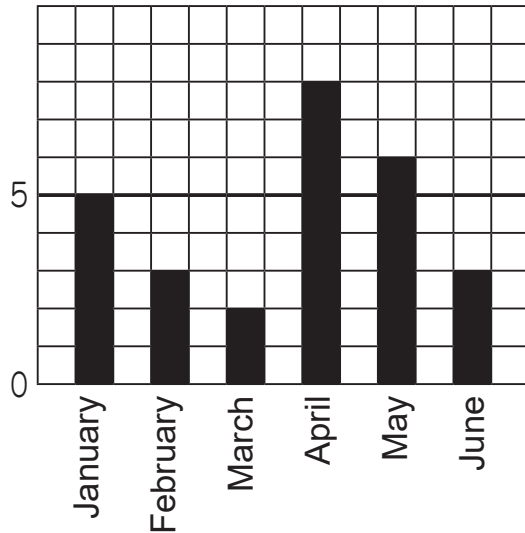
2 What is the difference between the number of language and social study like?

people

Example 2

A boy created the bar graph by tallying the number of students used the health room during 6 months. The result helped to call attention to students.

(People) Students used the health room



When the order of the category is fixed such as the months of the year, they are not ordered from largest to smallest.



1 Which month had the most students used?

April

2 Which month had the least students used?

March

3 Which of the month that the number of users has increased compared in the adjacent months?

April



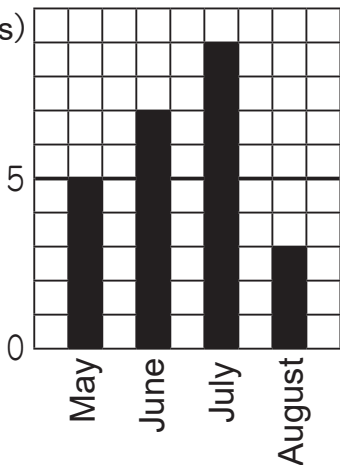
Why many students used health room in April?

Maybe new semester begins in the month.



2 A girl created the bar graph by tallying the number of books her classmates borrowed from the school library over four months to decide when she will reorganize books in the library.

(Number of books) Books borrowed in four months



1 In which month were the most books borrowed?

2 How many books were borrowed during that month?

Books

3 What is the difference the number of books borrowed in July and August?

books



I wonder the number of books borrowed was decreased sharply.

The school may enter summer vacation...



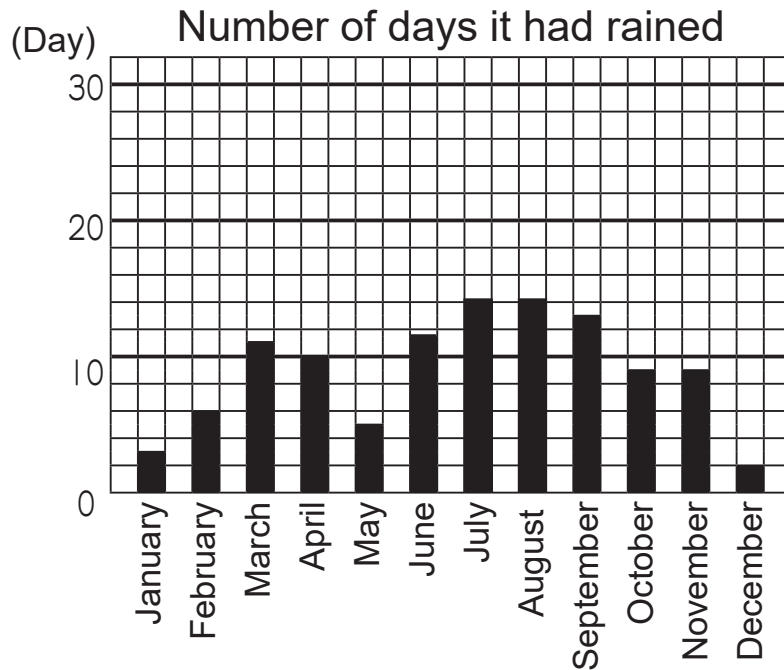
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Tables and Bar Graphs

Bar Graphs (2)

Example 1

A girl created the bar graph by tallying the number of days it had rained in a year to determine when farmers will sow.



1 How many days does one mark on the scale represent?

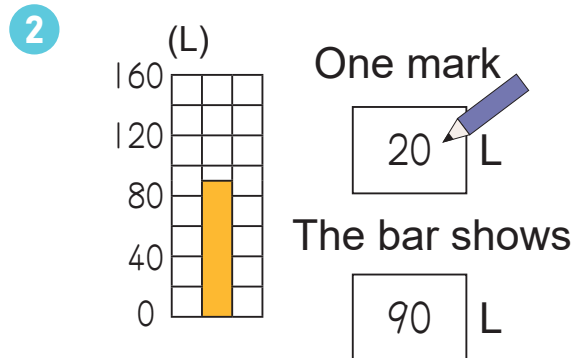
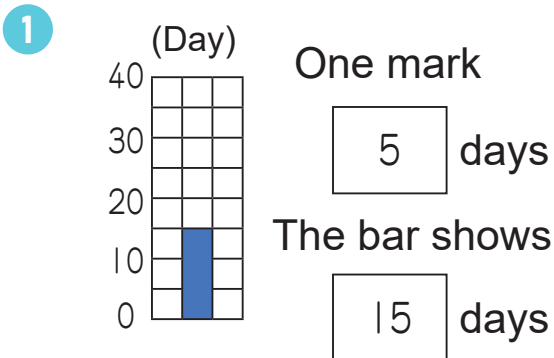
2 days

2 If it is the best to sow in the month with the least rainfall, which month should it be done?

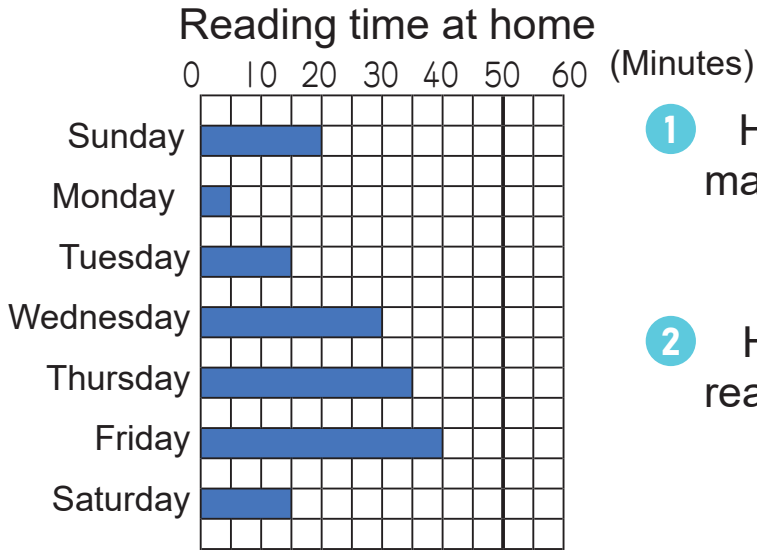
December

Example 2

In the bar graph below, how many units does one mark on the scale represent? How many units are shown in the bar?



- 1 A boy created the bar graph by tallying the number of minutes he read at home last week to calculate how many days he needs to finish current reading book.



- 1 How many minutes does one mark on the scale represent?

minutes

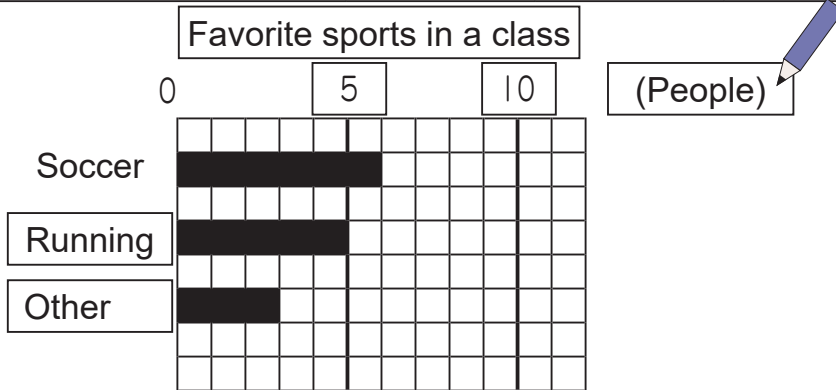
- 2 How many minutes did he read on Thursday?

minutes

Example 3 Construct the bar graph by using the table below.

Favorite sports in a class

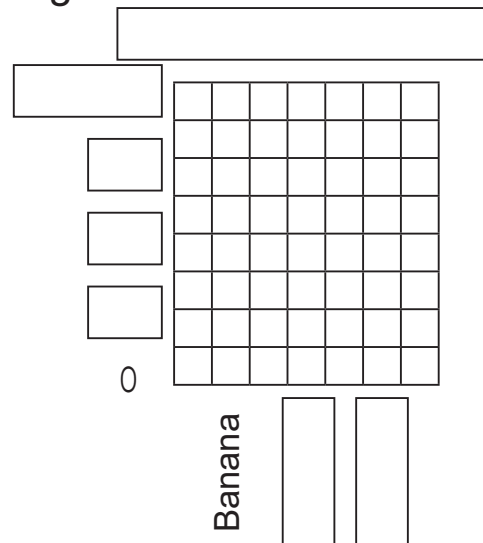
Favorite sports	Soccer	Running	Other	Total
Number of people	6	4	3	13



- 2 Construct the bar graph by using the table below.

Favorite fruits in a class

Favorite fruits	Number of people
Banana	25
Orange	20
Other	10



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Tables and Bar Graphs

Organizing Data Using Tables

Example 1 The tables below show what types of weather there was in June, July, and August to determine harvesting time.

Weather in June		Weather in July		Weather in August	
Type of weather	Number of days (Days)	Type of weather	Number of days (Days)	Type of weather	Number of days (Days)
Sunny	6	Sunny	11	Sunny	15
Cloudy	10	Cloudy	6	Cloudy	5
Rainy	14	Rainy	14	Rainy	11
Total	30	Total	31	Total	31

1 Which month had the most number of sunny days?

August

2 Fill in the blanks to make the combined table.

Type \ Month	June	July	August	Total
Sunny	6	11	15	32
Cloudy	10	6	5	21
Rainy	14	14	11	39
Total	30	31	31	92

The combined table is easy to see and compare data.
From June to August, the number of sunny days is increasing.



1 The tables below show the total sales for a clothing store for March, April, and May. The store owner is thinking of the number of clothes for store.

Sales for March

Type of item	Number of Pieces
T-shirt	26
Shirt	50
Hoodie	34
Total	110

Sales for April

Type of item	Number of Pieces
T-shirt	32
Shirt	41
Hoodie	17
Total	90

Sales for May

Type of item	Number of Pieces
T-shirt	52
Shirt	11
Hoodie	12
Total	75

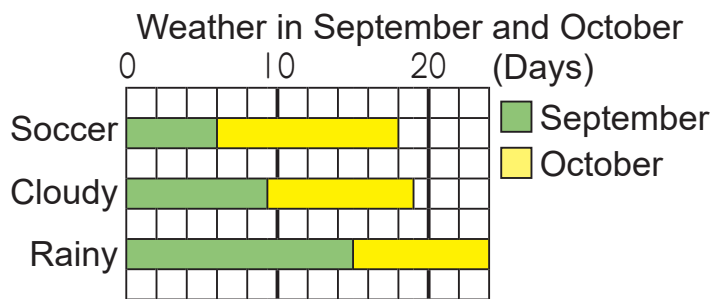
1 Fill in the blanks to make the combined table.

Type \ Month	March	April	May	Total
T-shirt				
Shirt				
Hoodie				
Total				

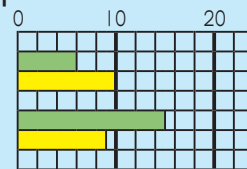
2 In which month were the most T-shirts sold?

Example 2 The tables below show what types of weather were more in September and October. Combine the bar graphs.

Type \ Month	September	October	Total
Sunny	6	12	18
Cloudy	9	10	19
Rainy	15	9	24
Total	30	31	61

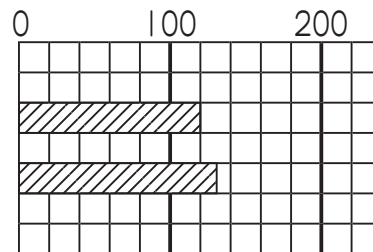
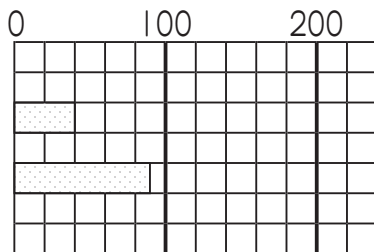


There is also a way to line up the bars side by side to compare the type in each month.

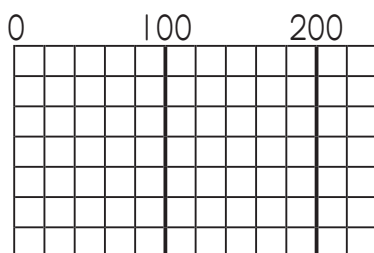


You can see what kind of weather there were in the two months.

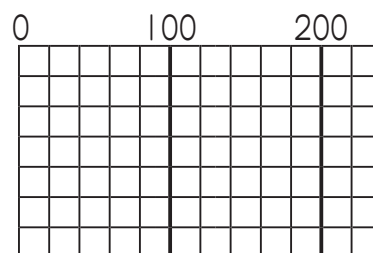
2 Combine the bar graphs in the following ways.



1 By adding two bars together.



2 By lining bars side by side.



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Tables and Bar Graphs

Review

1 Find the number of people who were surveyed by using tally marks. The table below summarizes the results of a class survey about the best three favorite fruits. Convert the tally into numerals and sort out the numbers in the table below.

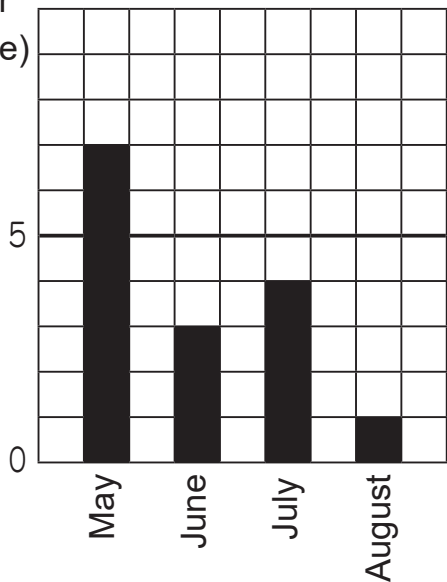
Apple	Banana	Avocado	Mango	Mango	Mango
Banana	Orange	Banana	Banana	Orange	Banana
Grape	Mango	Banana	Mango	Orange	
Orange	Watermelon	Orange	Orange	Banana	
Banana	Banana	Mango	Mango	Banana	

Banana	
Mango	
Orange	
Other	

Favorite fruits					Total
Number of people					

2 A girl created the bar graph by tallying the number of students absent from her class over four months to write an article for class newspaper.

(Number of people) **Absent students in four months**



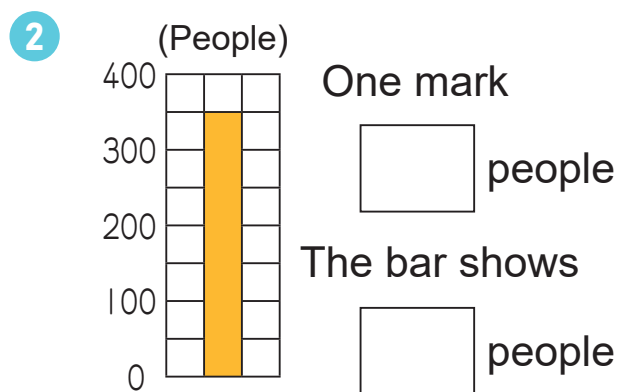
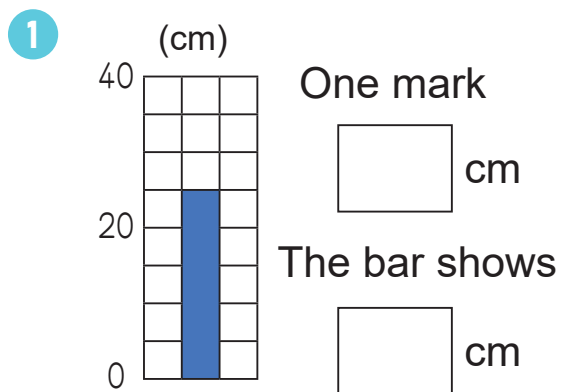
1 How many students were absent in July?

students

2 How many students were absent altogether?

students

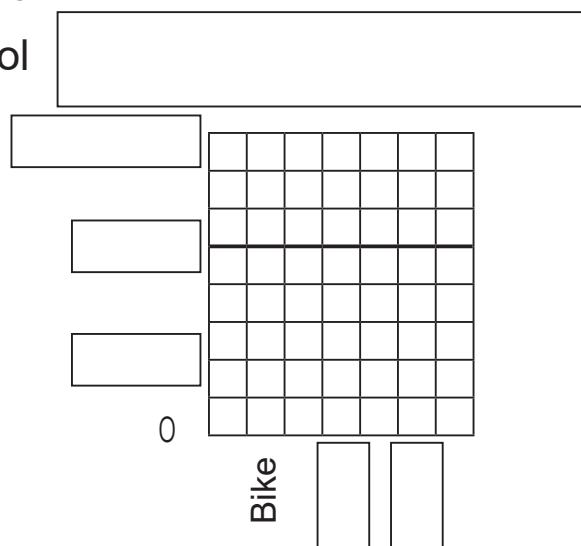
3 In the bar graph below, how many units does one mark on the scale represent? how many units are shown in the bar?



4 Construct the bar graph by using the table below.

Vehicles that passed in front of school from 9:00 a.m. to 9:30 a.m.

Kind	Number of vehicles (Vehicles)
Bike	12
Car	5
Bus	2



5 The tables below show the total sales for a stationary shop for March, April, and May. Fill in the blanks to make the combined table.

Sales for March

Type of item	Number of Pieces
Pen	18
Notebook	16
Other	12
Total	46

Sales for April

Type of item	Number of Pieces
Pen	19
Notebook	16
Other	8
Total	43

Sales for May

Type of item	Number of Pieces
Pen	18
Notebook	17
Other	10
Total	45

Type \ Month	March	April	May	Total
Pen				
Notebook				
Other				
Total				