

Grade 1 · Organizing and Reading Data · Lesson

Common Core 1.MD.C.4 · mathovore.fr

Data is information we collect, such as the answers students give to a question. We can show data in a tally chart, a picture graph, or a bar graph. To find how many more or how many fewer, subtract the smaller number from the larger number. Each graph in first grade has up to three groups.

Grade 1 Common Core: 1.MD.C.4

Key facts:

- A tally mark stands for 1, and a crossed bundle of marks stands for 5.
- In a picture graph, count the pictures in each row.
- In a bar graph, a taller bar means a greater number.
- To find how many more or fewer, subtract the smaller number from the larger number.

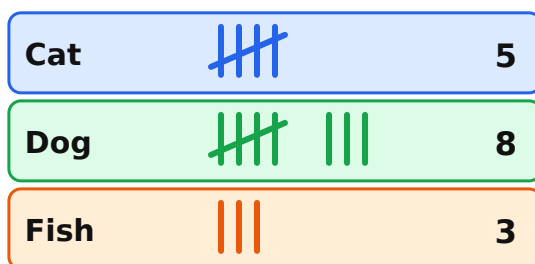
What is data?

Data is information we collect. Maya asks 16 classmates, "What is your favorite pet?" She writes down every answer. Then she shows her data in three ways: a tally chart, a picture graph, and a bar graph. All three show the same facts.

What is a tally chart?

A tally chart uses marks to count. Draw one mark for each answer. After four marks, the fifth mark crosses them. That crossed bundle means 5. Count the bundles by fives, then count the extra marks.

Favorite Pet



Tally chart: 5 cats, 8 dogs, 3 fish.

Tally mark

One mark stands for one answer. A crossed bundle stands for 5.

Look at Dog. There is 1 bundle and 3 extra marks. Count 5, 6, 7, 8. Dog has 8 votes.

What is a picture graph?

A picture graph uses one small picture for each answer. Each row has a name on the left. Count the pictures in a row to find that number. The key tells what one picture means.

Favorite Pet

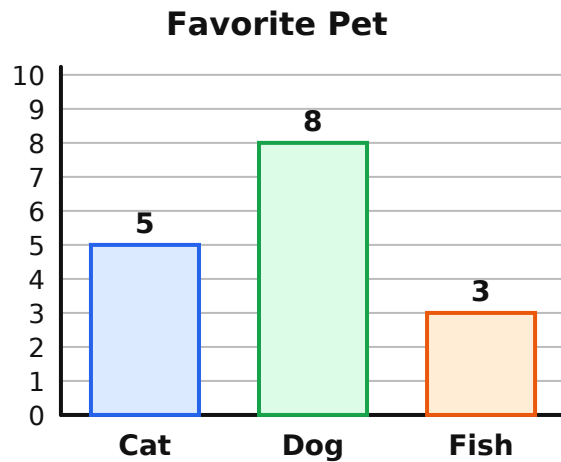


 Each picture = 1 vote

Picture graph: 5 cats, 8 dogs, 3 fish.

What is a bar graph?

A bar graph uses a bar for each group. A taller bar means more. Look at the top of the bar. Then slide your finger left to read the number.



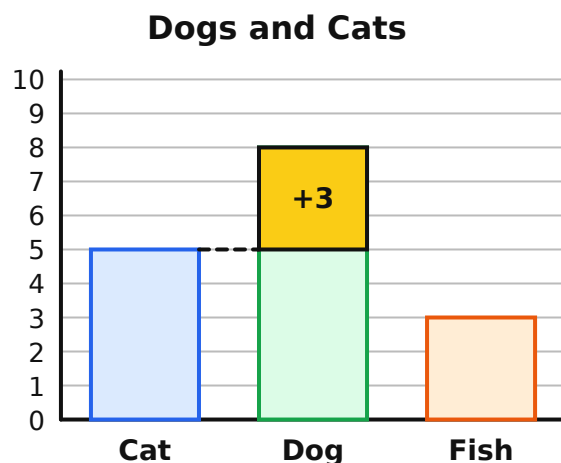
Bar graph: Cat 5, Dog 8, Fish 3.

How do you find how many more or how many fewer?

Pick the two groups you want to compare. Find the number for each group. Then subtract the smaller number from the larger number.

1. Read the number for each group.
2. Find the bigger number and the smaller number.
3. Subtract: bigger minus smaller.
4. Say the answer in a sentence.

Example. How many more students chose dogs than cats? Dogs: 8. Cats: 5. $8 - 5 = 3$. So 3 more students chose dogs. Also, 3 fewer students chose cats.



The yellow part shows the 3 extra votes for dogs.

Question	What to do
How many in all?	Add all the groups: $5+8+3=16$
How many more?	Subtract: $8-5=3$
How many fewer?	Subtract: $8-5=3$

Organizing and Reading Data: frequently asked questions

What is a tally chart?

A tally chart is a chart that uses marks to count. One mark means one answer, and a crossed bundle means 5. It helps us count answers one at a time.

How do you count tally marks?

Count each crossed bundle as 5, and count by fives. Then count the extra marks one by one. A bundle and 3 marks make 5, 6, 7, 8.

What does the key in a picture graph tell us?

The key tells what one picture means. In first grade, each picture usually stands for 1 vote. Count the pictures in each row.

How do you read a bar graph?

Find the top of the bar. Follow the line across to the number on the left side. A taller bar means more.

How do you tell how many more?

Find the number for each group and subtract the smaller from the larger. If dogs have 8 votes and cats have 5, then $8-5=3$. Dogs have 3 more.