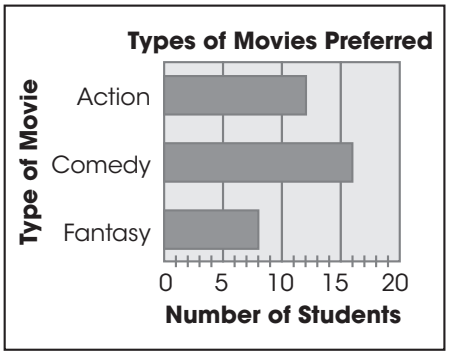
Learn About

Interpreting Graphs and Charts: Bar Graphs and Pictographs

Graphs are used to organise data and information. A **bar graph** uses numbers and bars to show how many. **Pictographs** use pictures or symbols to show how many. The bar graph and the pictograph below each show that 12 students prefer action movies, 16 students prefer comedies and 8 students prefer fantasy movies.

Bar Graph

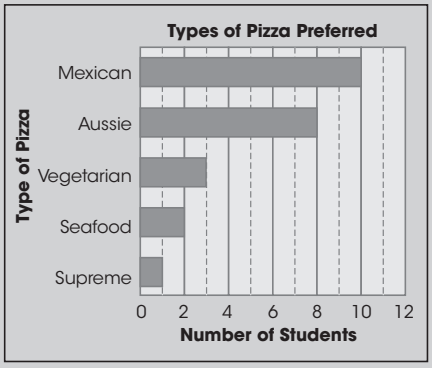


Pictograph

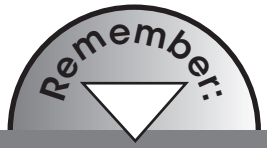
Type of Movie	Number of Students
Fantasy	👍👍
Comedy	👍👍👍👍
Action	👍👍👍

👍 = 4 students

John's favourite meal is pizza. He likes Mexican pizza. John asked the students in his class to name their favourite type of pizza. The bar graph shows the results of John's survey. How many more students prefer Aussie pizza than vegetarian pizza?



Eight students prefer Aussie pizza and three students prefer vegetarian pizza.
$8 - 3 = 5$
So, **five more students** prefer Aussie pizza than vegetarian pizza.



Bar graphs use numbers and bars to show how many.
Pictographs use pictures or symbols to show how many.

Look at the answer choices for each question. Read why each answer choice is correct or not correct.

1. How many people surveyed preferred watermelon?

Ⓐ 10 people

This is not correct. The bar for watermelon lines up with a number between 15 and 20. So, 10 cannot be correct.

Ⓑ 15 people

This is not correct. The bar for watermelon lines up with a number between 15 and 20. It is higher than the line for 15.

● 18 people

This is correct. The bar for watermelon lines up with a number between 15 and 20. It is closer to 20 than to 15, so 18 is reasonable.

Ⓓ 20 people

This is not correct. The bar for watermelon lines up with a number between 15 and 20, but it is below the line for 20.

2. How many people surveyed were 19 or younger?

● 16 people

This is correct. The number of people surveyed who were 19 or younger is equal to the sum of the number of people 9 or younger, 10–14 and 15–19.
3 + 5 + 8 = 16 people.

Ⓑ 14 people

This is not correct. The number of people surveyed who were 19 or younger is equal to the sum of the number of people 9 or younger, 10–14 and 15–19.
3 + 5 + 8 = 16 people, not 14.

Ⓒ 12 people

This is not correct. The number of people surveyed who were 19 or younger is equal to the sum of the number of people 9 or younger, 10–14 and 15–19.
3 + 5 + 8 = 16 people, not 12.

Ⓓ 8 people

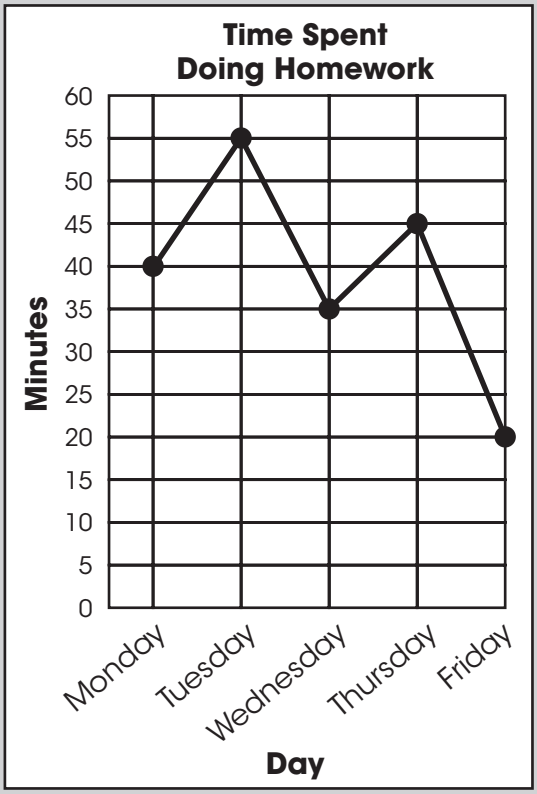
This is not correct. The number of people surveyed who were 19 or younger is equal to the sum of the number of people 9 or younger, 10–14 and 15–19.
3 + 5 + 8 = 16 people, not 8.

Lesson 10

Read the passage.
Then do Numbers 1–5.

Time for Homework

Tessa began year four two weeks ago. She has noticed that she gets more homework in year four than she did in year three. Tessa recorded the amount of time she spent doing homework each day for five days. She displayed her data in a line graph.



1. How much time did Tessa spend doing homework on Thursday?

Ⓐ 30 minutes
Ⓑ 35 minutes
Ⓒ 40 minutes
Ⓓ 45 minutes

2. How much more time did Tessa spend doing homework on Monday than on Wednesday?

Ⓐ 5 minutes
Ⓑ 10 minutes
Ⓒ 15 minutes
Ⓓ 20 minutes

Lesson 19

Read the passage.
Then do Numbers 1–5.

Jenna's Gems

Jenna designs and makes jewellery. She sells her creations at craft markets. Jenna recorded the items that she sold at a craft market this week. She displayed her data in a pictograph.

Jewellery Sales

Item	Number Sold
Bracelets	
Pairs of Earrings	
Necklaces	
Rings	

 = 3 items

1. How many more necklaces than bracelets did Jenna sell?

Ⓐ 7 necklaces
Ⓑ 12 necklaces
Ⓒ 15 necklaces
Ⓓ 21 necklaces

2. How many bracelets and pairs of earrings did Jenna sell in all?

Ⓐ 20 bracelets and pairs of earrings
Ⓑ 60 bracelets and pairs of earrings
Ⓒ 80 bracelets and pairs of earrings
Ⓓ 90 bracelets and pairs of earrings

Self-Assessment 2
Lessons 6–10

Answer these questions after you have completed Lessons 6–10. Before you begin, re-read what you wrote in Self-Assessment 1.

FOCUS on Interpreting Graphs and Charts, Book D

Name _____ Date _____

1. Rate your work in Lessons 6–10. Circle your answer.

   successful somewhat successful needs improvement

2. Did any of the questions give you trouble? _____
   If so, what kind of trouble did you have?

   _____

   _____

   Is this the same kind of trouble you had in Lessons 1–5? _____

3. Did you find the questions easier or more difficult than those in Lessons 1–5?

   _____

   Why do you think this is so?

   _____

   _____

4. Did you meet the goal you set for yourself for Lessons 6–10? _____
   Why or why not?

   _____

   _____

5. What is your goal for Lessons 11–15?

   _____

   _____

Cut along the dotted line.