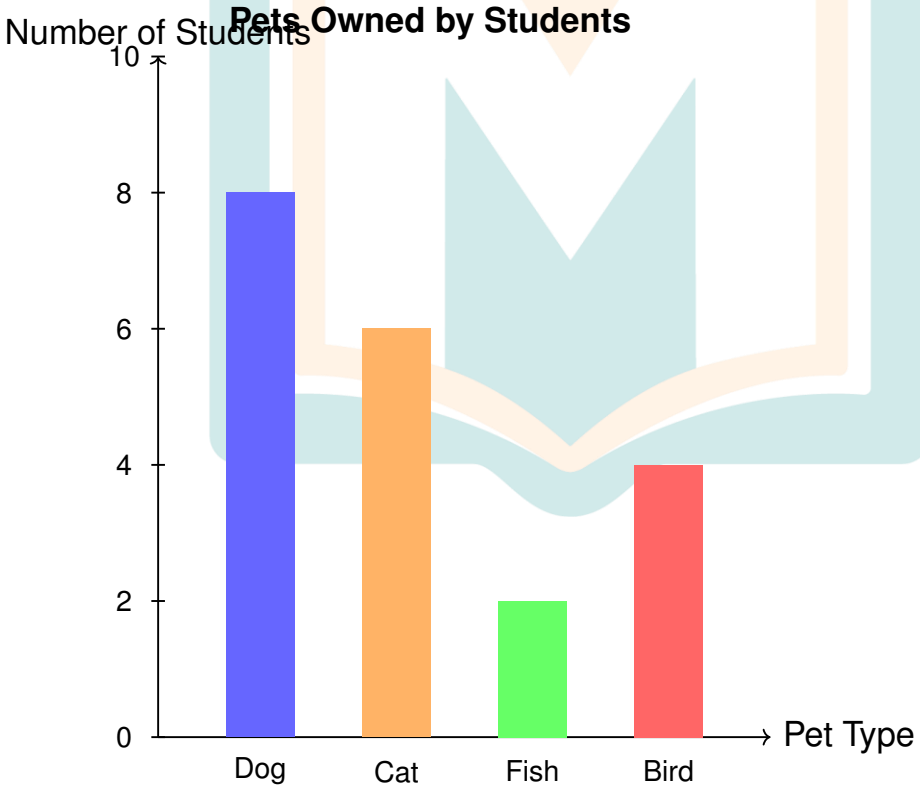
Merit Tutoring

Worksheet 47: Interpreting Column Graphs

Year 6 Mathematics — Data & Probability — Name: _____

Section 1: Fluency — Reading Column Graphs

Question 1: Look at the column graph below showing "Pets Owned by Students". Which pet is the most popular?



Answer: _____

Question 2: How many students own Cats?

Answer: _____

Question 3: How many students own Fish?

Answer: _____

Question 4: Which pet is the least popular?

Answer: _____

Question 5: How many students own Birds?

Answer: _____

Data Detective!

Why did the column graph go to the gym?
To work on its bar strength!

Section 2: Reasoning — Comparing Data

Question 6: Using the graph from Section 1, how many **more** students own Dogs than Fish?

Answer: _____

Question 7: How many students were surveyed in total? *Hint:* Add all the columns together.

Answer: _____

Question 8: How many more students own Cats than Birds?

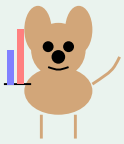
Answer: _____

Question 9: If 3 more students got Dogs as pets, how many students would own Dogs in total?

Answer: _____

Question 10: What is the difference between the most popular pet and the least popular pet?

Answer: _____

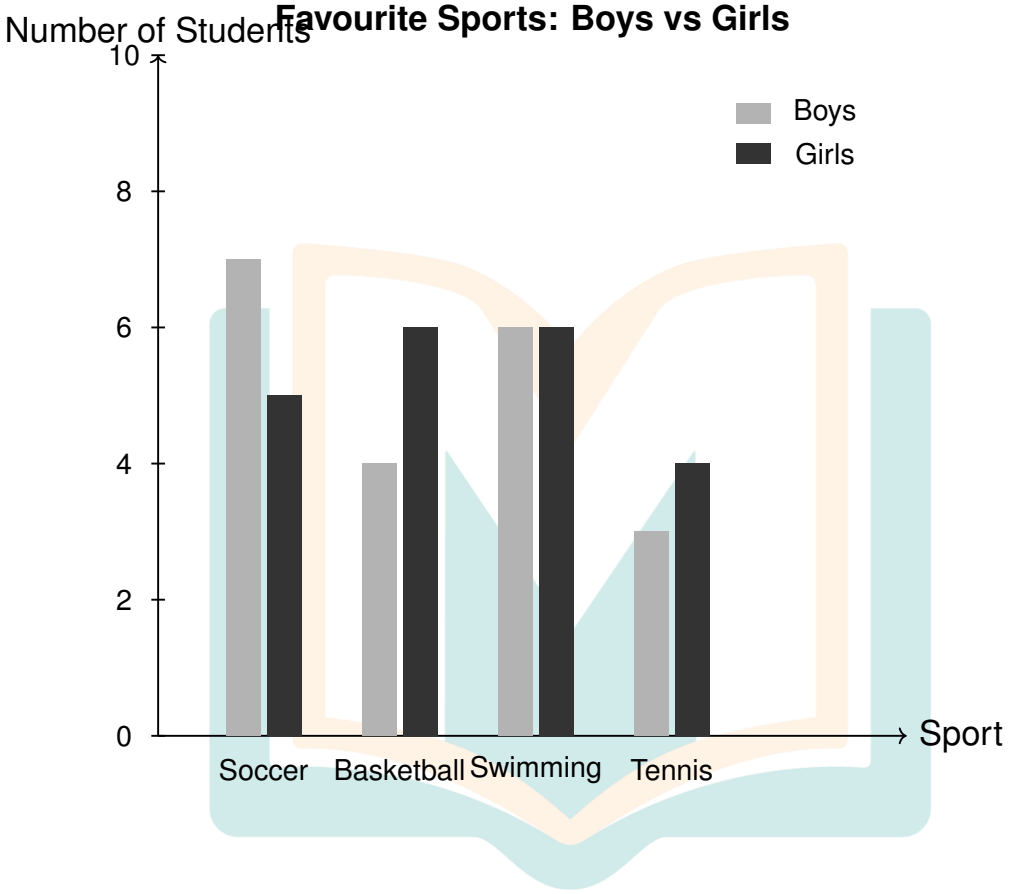


Graph Guru!

What did the bar chart say to the pie chart?
You're so well-rounded, but I'm more straightforward!

Section 3: Challenge — Side-by-Side Column Graphs

Question 11: Look at the side-by-side column graph below showing "Favourite Sports: Boys vs Girls". Who likes Soccer more: Boys or Girls?



Answer: _____

Question 12: How many Boys like Basketball?

Answer: _____

Question 13: How many Girls like Soccer?

Answer: _____

Question 14: Which sport had the **same** number of votes for both Boys and Girls?

Answer: _____

Question 15: Which sport is more popular with Girls than Boys?

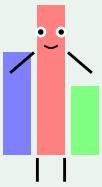
Answer: _____

Question 16: How many students in total like Swimming (Boys + Girls)?

Answer: _____

Question 17: What is the total number of Boys surveyed? *Hint:* Add all the gray bars.

Answer: _____



Comparison Champion!

Why did the side-by-side graph win an award?
Because it was outstanding in its field... of comparison!

Excellent work! Check your answers on the next page.

Worksheet 47: Answer Key

Section 1: Fluency — Reading Column Graphs

Question 1: Dog
Question 2: 6 students
Question 3: 2 students
Question 4: Fish
Question 5: 4 students

Section 2: Reasoning — Comparing Data

Question 6: 6 more students (

$$8 - 2 = 6$$

)
Question 7: 20 students (

$$8 + 6 + 2 + 4 = 20$$

)
Question 8: 2 more students (

$$6 - 4 = 2$$

)
Question 9: 11 students (

$$8 + 3 = 11$$

)
Question 10: 6 students (

$$8 - 2 = 6$$

)

Section 3: Challenge — Side-by-Side Column Graphs

Question 11: Boys (Boys: 7, Girls: 5)
Question 12: 4 Boys

Question 13: 5 Girls
Question 14: Swimming (Both have 6 students)
Question 15: Basketball (and Tennis) (Basketball: Boys 4, Girls 6; Tennis: Boys 3, Girls 4)
Question 16: 12 students (

$$6 + 6 = 12$$

)
Question 17: 20 Boys (

$$7 + 4 + 6 + 3 = 20$$

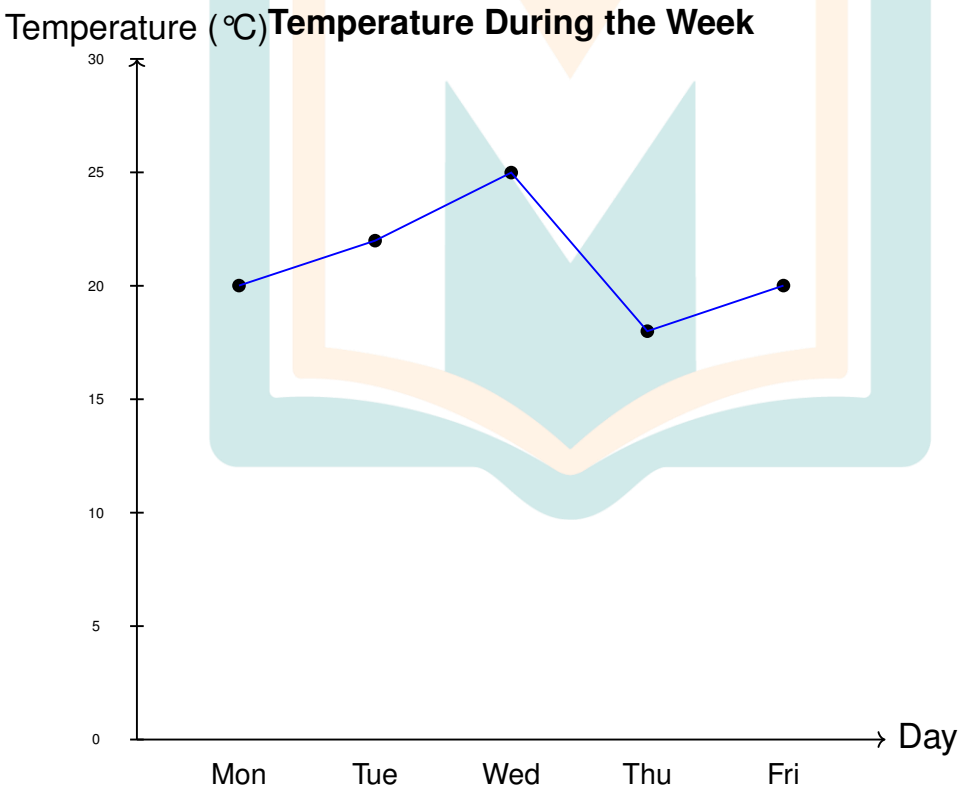
)

Worksheet 48: Interpreting Line Graphs

Year 6 Mathematics — Data & Probability — Name: _____

Section 1: Fluency — Reading Line Graphs

Question 1: Look at the line graph below showing "Temperature During the Week". What was the temperature on Wednesday?



Answer: _____

Question 2: What was the temperature on Monday?

Answer: _____

Question 3: Which day had the highest temperature?

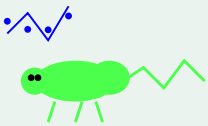
Answer: _____

Question 4: Which day had the coldest temperature?

Answer: _____

Question 5: What was the temperature on Friday?

Answer: _____



Line Graph Legend!

Why did the line graph go to therapy?
Because it had too many ups and downs!

Section 2: Reasoning — Describing Trends

Question 6: Using the graph from Section 1, did the temperature increase or decrease between Tuesday and Wednesday?

Answer: _____

Question 7: Did the temperature increase or decrease between Wednesday and Thursday?

Answer: _____

Question 8: Between which two days did the temperature drop the most?

Answer: _____

Question 9: What is the difference between the highest and lowest temperatures during the week?

Answer: _____

Question 10: On how many days was the temperature 20℃ or higher?

Answer: _____

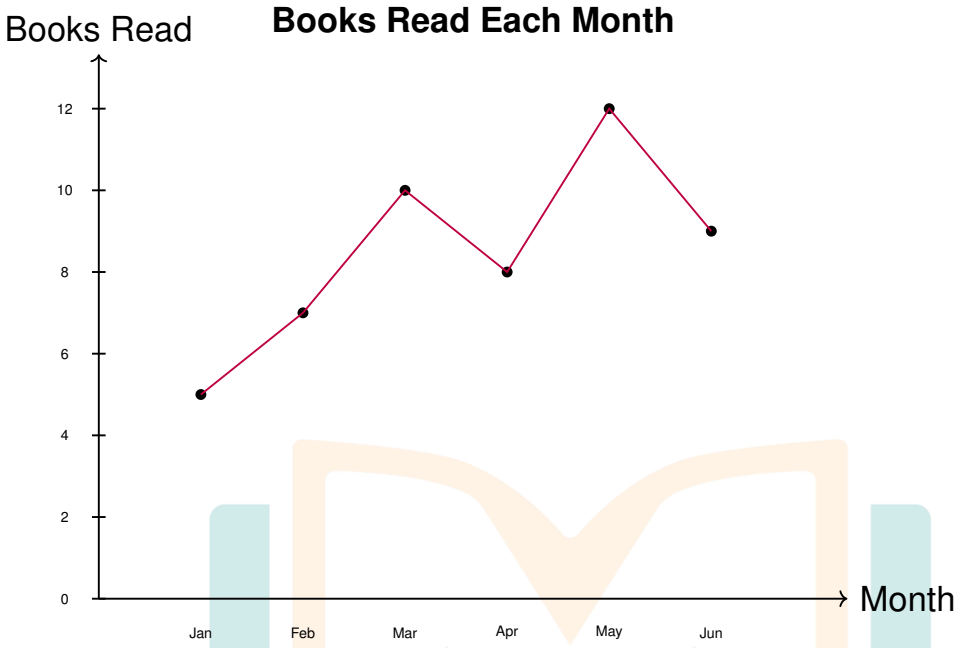
Trend Tracker!

What did the temperature say to the line graph?
Thanks for keeping track of my hot and cold moods!

Section 3: Challenge — Storytelling from Data

Question 11: Look at the graph below showing ”Books Read Each Month”.

In which month were the most books read?



Answer: _____

Question 12: How many books were read in January?

Answer: _____

Question 13: Between which two consecutive months did the number of books read increase the most?

Answer: _____

Question 14: Why might the temperature have dropped on Thursday in the first graph? Give a logical reason (e.g., weather change, rain, cold front).

Answer: _____

_____

Question 15: Based on the temperature trend from Thursday to Friday (going back up), predict what the temperature might be on Saturday. Explain your reasoning.

Answer: _____

_____

Question 16: Looking at the ”Books Read” graph, why might someone read more books in May than in other months? Give one possible reason.

Answer: _____

_____

Question 17: If the trend continued and books read dropped by 3 from June to July, how many books would be read in July?

Answer: _____

Data Storyteller!

Why did the line graph write a book?
Because it had such an interesting story with lots of plot twists!

Outstanding work! Check your answers on the next page.

Worksheet 48: Answer Key

Section 1: Fluency — Reading Line Graphs

Question 1: 25℃
Question 2: 20℃
Question 3: Wednesday
Question 4: Thursday
Question 5: 20℃

Section 2: Reasoning — Describing Trends

Question 6: Increase (from 22℃ to 25℃)
Question 7: Decrease (from 25℃ to 18℃)
Question 8: Between Wednesday and Thursday (dropped 7℃:

$$25 - 18 = 7$$

)
Question 9: 7℃ (

$$25 - 18 = 7$$

)
Question 10: 4 days (Monday: 20℃, Tuesday: 22℃, Wednesday: 25℃, Friday: 20℃)

Section 3: Challenge — Storytelling from Data

Question 11: May (12 books)
Question 12: 5 books
Question 13: Between February and March (increased by 3 books:

$$10 - 7 = 3$$

)
Question 14: Accept reasonable answers such as: ”It might have rained”, ”A cold front came through”, ”It was cloudy”, ”Storm passed through”, etc.
Question 15: Accept reasonable predictions around 21-23℃ with logical reasoning. Example: ”About 22℃ because the temperature is gradually ris-

ing again after Thursday's drop." (Accept any prediction between 20-25℃ with reasonable explanation)

Question 16: Accept reasonable answers such as: "School holidays", "More free time", "Reading challenge at school", "Good weather for reading outside", "Library visit", etc.

Question 17: 6 books (

$$9 - 3 = 6$$

)

