## Year 5 Statistics

Q1.
Here is part of the bus timetable from Riverdale to Mott Haven.

| Riverdale | $10: 02$ | $10: 12$ | $10: 31$ | $10: 48$ |
| :--- | :---: | :---: | :---: | :---: |
| Kingsbridge | $10: 11$ | $10: 21$ | $10: 38$ | $10: 55$ |
| Fordham | $10: 28$ | $10: 38$ | $10: 54$ | $11: 11$ |
| Tremont | $10: 36$ | $10: 44$ | $11: 00$ | $11: 17$ |
| Mott Haven | $10: 53$ | $11: 01$ | $11: 17$ | $11: 34$ |

How many minutes does it take the 10:31 bus from Riverdale to reach Mott Haven?


Mr Evans is at Fordham at 10:30
What is the earliest time he can reach Tremont on the bus?


Q2.
This chart shows the population of Cornwall from 1950 to 2010.


Look at the chart.
In which year did the population first reach 400,000?


How much did the population increase from 1950 to 2000 ?


What was the population of Cornwall in 2010?


Q3.

Two companies sell toys online. They charge to deliver.
Describe the delivery cost of the second company.
The first company is done for you.



1 mark

Q4.
Amy did a survey of what time people get up on a Sunday morning.
This table shows her results for 150 people.

| Time | number of people |
| :--- | :---: |
| before 7 am | 13 |
| 7:00 am to 7:59 am | 28 |
| $8: 00 \mathrm{am}$ to $8: 59 \mathrm{am}$ | 59 |


| $9: 00$ am to $9: 59 \mathrm{am}$ | 36 |
| :--- | :--- |
| 10 am and after | 14 |

Look at the table.
How many people get up at $\mathbf{8} \mathbf{a m}$ or later?

Amy says,

## 'Two-thirds of the 150 people in the survey get up before 9 am.'

Amy is correct.
Explain how you know.


Q5.
This graph shows how the temperature changed in Liam's room one afternoon.


Estimate the temperature at $3: 15 \mathrm{pm}$.


Estimate the time when the temperature was highest.


How much did the temperature change from 2 pm to 2:30pm? Give your answer to the nearest degree.


1 mark

Q6.
This table shows the number of things to eat in five children's lunch boxes.

|  | sandwiches | apples | bananas | fruit bars |
| :---: | :---: | :---: | :---: | :---: |
| Lisa | 1 | 2 | 0 | 2 |

Page 5

| Jack | 2 | 0 | 2 | 1 |
| :---: | :---: | :---: | :---: | :---: |
| Kemi | 1 | 1 | 0 | 2 |
| Nik | 1 | 2 | 1 | 0 |
| Ben | 2 | 1 | 2 | 1 |

Here is a graph of the information for four of the children.


Which child's information is missing from the graph?


Explain how you know.


Q7.
Alfie and his brother walked from home to their school.
Their school is 2 kilometres from home.
The graph shows information about Alfie's journey.

(a) How does the graph show that Alfie walked at a constant speed for all of his journey?
$\qquad$
(b) Alfie's brother left home $\mathbf{1 0}$ minutes before Alfie.

He arrived at school $\mathbf{2 0}$ minutes after Alfie.
He walked at a constant speed for all of his journey.
At what time did Alfie overtake his brother?


Q8.
Here is a sorting diagram with four sections, $\mathbf{A}, \mathbf{B}, \mathbf{C}$ and $\mathbf{D}$.

|  | multiple of 10 | not a multiple <br> of 10 |
| :--- | :---: | :---: |
| multiple of 20 | $\mathbf{A}$ | $\mathbf{B}$ |
| not a multiple <br> of 20 | C | D |

Write a number that could go in section $\mathbf{C}$.


Section B can never have any numbers in it.
Explain why.


1 mark

Q9.
This graph shows the distance Alfie and Chen walked in an afternoon. They started at $1: 45 \mathrm{pm}$ and had two breaks.


How many kilometres did they walk between the first and second breaks?

At what time did Alfie and Chen start their second break?


1 mark

Q10.
This chart shows the number of books some children read last month.


How many children altogether read more than 9 books?


7 children read 4 books.
1 child read 5 books.
Lin says,

## 'That means 2 children read 6 books'.

Explain how she can work this out from the chart.


Page 10

Q11.
This diagram shows the distances of different towns from Birmingham.


Write the name of a town which is between $\mathbf{3 0}$ and 50 miles from Birmingham.


Use the diagram to estimate the distance in miles from Birmingham to Mansfield.


Q12.
Here is a table of the pets owned by six children.

| Name of child | Cat | Dog | Bird | Rabbit |
| :--- | :---: | :---: | :---: | :---: |
| David | 3 | 1 | 0 | 0 |
| Julie | 0 | 0 | 1 | 2 |
| Carl | 2 | 0 | 0 | 1 |
| Terry | 0 | 1 | 0 | 1 |
| Mary | 0 | 2 | 0 | 0 |
| Hawa | 1 | 0 | 1 | 1 |

Here is a graph of the pets of five of the children.


The pets of one of the children are not on the graph.
Whose pets are not on the graph?
$\qquad$

Explain how you know.


Page 13

