1. Five children took part in a chess competition.

They each played six games.
This table shows how many games each child won, drew or lost.

|  | won | drew | lost |
| :---: | :---: | :---: | :---: |
| Alfie | 1 | 3 | 2 |
| Megan | 2 | 2 | 2 |
| Chen | 3 | 3 | 0 |
| Donna | 4 | 0 | 2 |
| Tom | 0 | 5 | 1 |

How many children drew more games than they lost?


Each child scores two points for a win, one point for a draw, no points for a loss.

Who scored the most points?
2.

Here are the sunrise and sunset times for some days in July.

| Date | Sunrise | Sunset |
| :---: | :---: | :---: |
| 7th | $04: 53$ | $21: 18$ |
| 14th | $05: 00$ | $21: 12$ |
| 21st | $05: 09$ | $21: 05$ |
| 28th | $05: 18$ | $20: 55$ |

How many minutes earlier is the sunset on 28th July than on 7th July?


1 mark
3. Here are three scatter graphs showing the heights of people and the cost of clothes.


Chen says,
'The taller you are, the more your clothes cost.'

Megan says,
'The shorter you are, the more your clothes cost.'
Alfie says,

## 'There is no relationship between your height and what your clothes cost.'

Write the letter of each scatter graph that shows what each person says.

Chen $\qquad$ Megan $\qquad$ Alfie $\qquad$
4. 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?


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

5. Kirsty, Seb, Mina, Jack and Donna belong to a sports club.

This table shows the sports they do in one week.

|  | Mon | Tues | Wed | Thurs | Fri |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Swimming | Kirsty <br> Jack |  | Jack | Kirsty <br> Donna | Donna |
| Jogging | Seb | Mina |  | Mina <br> Kirsty <br> Jack |  |
| Cycling |  | Kirsty <br> Donna |  | Jack | Seb |

How many of the children do not go swimming?


Write the names of all the children who go both jogging and cycling.
6. Mandy bounces a ball. She plots the results on this graph.


After 50 seconds Mandy has done 65 bounces.
(a) Plot this on the graph.
(b) Use the graph to estimate the number of bounces Mandy has done after 35 seconds.
7. The table below shows five journeys a taxi driver made one day.

| journey <br> number | start time | number of <br> passengers | distance | cost |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $9: 15 \mathrm{am}$ | 2 | 8 km | $£ 7.50$ |
| 2 | $9: 40 \mathrm{am}$ | 1 | 12 km | $£ 9.90$ |
| 3 | $10: 30 \mathrm{am}$ | 3 | 7 km | $£ 7.60$ |
| 4 | $10: 50 \mathrm{am}$ | 1 | 21 km | $£ 15.50$ |
| 5 | $12: 10 \mathrm{pm}$ | 4 | 15 km | $£ 12.00$ |

On journey number 5, the passengers shared the cost equally.
How much did each passenger pay?


How many passengers made journeys of more than 10 km ?


1 mark
The 12 km journey took 40 minutes.
What time did the taxi finish its journey?

8. Kirsty measured the length of her shadow every hour on one sunny day. She plotted her results on this graph.

Length of shadow (cm)


Look at the graph.
Estimate the length of Kirsty's shadow at 3:30 pm.


Estimate a time when her shadow was 180 centimetres long.

9. 500 children started a 20 kilometre sponsored cycle ride.

This graph shows how far they cycled.


Distance in km
At what distance were exactly half of the children still cycling?


1 mark
Estimate how many children completed the 20 kilometre cycle ride.

1 mark
10.

Class 6 count how many seeds they find under two trees.
They show the data in a graph.

- oak
- chestnut


How many seeds did they find in week 3 altogether?


1 mark
In how many weeks did they find more than 40 chestnut seeds?


1 mark
11.

Here are four shapes in a Carroll diagram.


Use this information to write the letters $\mathbf{A}, \mathbf{B}$ and $\mathbf{D}$ in the Venn diagram below.

12. The original price of this car is $£ 8,999$


What is the sale price of the car?
13. This picture shows the masses of eight kittens.


What is the difference in mass between the heaviest kitten and the lightest kitten?


1 mark

The masses of the kittens are to be put in four groups.
Write the missing numbers in the table.
One has been done for you.

| Mass in g | Number of <br> kittens |
| :---: | :---: |
| $250-299$ |  |
| $300-349$ |  |
| $350-399$ |  |
| $400-449$ | 1 |

14. Here are three digit cards.


Use each card once to make these statements correct.

15. Write these in order of size, starting with the smallest.

16. Join each number to the set of numbers that it belongs to.

One has been done for you.

17. Complete these calculations.
$15 \times$
$100=$


$$
\div \quad 100 \quad=\quad 150
$$


18. Circle two numbers that add together to equal $\mathbf{0 . 2 5}$

$$
\begin{array}{llll}
0.05 & 0.23 & 0.2 & 0.5
\end{array}
$$

1 mark
19. Ken is playing a game. He has 4,289 points.

Then he scores another 355 points.
Ken's target is 6,000 points.
How many more points does Ken need to reach his target?

20.

potatoes
$£ 1.50$ per kg

carrots
$£ 1.80$ per kg

Jack buys $1 \frac{1}{2} \mathrm{~kg}$ of potatoes and $\frac{1}{2} \mathrm{~kg}$ of carrots.
How much change does he get from $£ 5$ ?

21.

Layla makes jewellery to sell at a school fair.

Each bracelet has 53 beads.

She makes 68 bracelets.

Each necklace has 105 beads.


She makes 34 necklaces.

How many beads does Layla use altogether?

22. Adam is making booklets.


Each booklet must have $\mathbf{3 4}$ sheets of paper.
He has 2 packets of paper.
There are 500 sheets of paper in each packet.
How many complete booklets can Adam make from 2 packets of paper?

23.

In this circle, $\frac{1}{4}$ and $\frac{1}{6}$ are shaded.


What fraction of the whole circle is not shaded?

24. In this diagram, the number in each box is the sum of the two numbers below it. Write the missing numbers.

25. Write the missing fractions.


$$
\frac{3}{5}+-\frac{2}{5}=\frac{7}{5}
$$

26. 

Tick $(\checkmark)$ two cards that give a total of 5

27.

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 |
| $8: 00$ am to 8:59 am | 59 |
| $9: 00$ am to 9:59 am | 36 |
| 10 am and after | 14 |

Look at the table.
How many people get up at $\mathbf{8}$ am 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.

28. Write the missing fractions.

$2 \frac{3}{4}+\square-\frac{1}{5}=3$
29. How many halves are there in 15 ?

