1. Park School collects money for three charities.

This pictogram shows how much they have collected.

stands for £100

| $\bigcirc$ Save Dolphins | $囚$ | $\otimes$ | $\Theta$ | $\Theta$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ( Wildwatch | $\otimes$ | $\otimes$ | 0 |  |  |
| 5 Plant-a-Tree |  |  |  |  |  |

How much more have they collected for Save Dolphins than Plant-a-Tree?


1 mark

The target for Wildwatch is $£ 500$
How much more money do they need to collect for Wildwatch?


1 mark

How much money have they collected altogether, rounded to the nearest hundred pounds?

## $£$

1 mark
2. Class 6 did a survey of birthday dates.

This chart shows the number of people with birthdays in each three months of the year.


From the chart, how many people have a birthday before July?


1 mark

Nobody has a birthday in October.
Six people have a birthday in November.
How many people have a birthday in December?


1 mark
3. This graph shows the number of people living in a town.


Look at the graph.
How many people lived in the town in $1985 ?$


1 mark

In which year was the number of people the same as in 1950 ?


1 mark

Find the year when the number of people first went below 20000

4. Here is a diagram for sorting shapes.

One of the shapes is in the wrong place.
Put a cross ( $\mathbf{X}$ ) on it.

5. This chart shows the number of cars in a car park at different times on one day.


There are 80 cars in the car park when it is full.

How many empty spaces were there in the car park at 3 pm ?


1 mark

Circle all the times when the car park was less than half full.

| 10 | 11 | 12 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $a m$ | am | noon | pm | pm | pm | pm |

6. Here are four labels.


Write each label in the correct position on the sorting diagram below.

7. 40 children each chose their favourite flavour of yogurt. This chart shows the results.
yogurt flavour

| peach |  | banana |  |  | lemon |  | raspberry |  |  |  | plain |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

How many children chose lemon yogurt?
$\square$

How many more children chose raspberry than plain yogurt?


1 mark
8. Class 6 launched some balloons at a school fete.


This diagram shows how far some of the balloons travelled.


How many balloons on the diagram travelled between 20 km and 30 km ?


1 mark

Estimate how far Hassan's balloon travelled.

9. Here are two spinners, $A$ and $B$.


A


B

Hassan spins the pointer on each spinner.
He adds his two scores together.
For each statement put a tick $(\checkmark)$ to show if it is certain, possible or impossible.
One has been done for you.


The total
will be more than 15
certain
possible

impossible

The total will be an even number $\square$
$\square$
$\square$
The total will be less than 6 $\square$
$\square$
$\square$

The score on A will be less than the score on B .

10. Rosie collects data about birds visiting a bird table.

Here are her results.

| Blackbird | HH |
| :--- | :--- |
| Sparrow | $\\|$ |
| Robin | $\\|\\|$ |
| Blue tit | $\\|\\|$ |
| Other | Hサ |



Draw two more lines to complete the graph.


1 mark

Rosie saw 20 birds altogether.
What fraction of the birds were blackbirds?


1 mark
11. Five children have ticked this table to show on which days they are free to go out.

|  | Emma | David | Lin | Jack | Rosie |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Mon |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
| Tue | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |
| Wed |  | $\checkmark$ |  |  | $\checkmark$ |
| Thu |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Fri | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |

On how many days are more than two children free to go out?


1 mark

On which days are Lin and Rosie both free to go out together?

1 mark
12. This chart shows the number of books some children read last month.


How many children altogether read more than 9 books?


1 mark

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.

13. Class 6 did a survey of the number of trees in a country park.


This pie chart shows their results.


Estimate the fraction of trees in the survey that are oak trees.


1 mark

The children counted 60 ash trees.
Use the pie chart to estimate the number of beech trees they counted.


1 mark
14. Class 6 did a survey of their favourite types of story book.

Here are their results.


How many more children chose adventure books than fantasy books?


Five girls chose animal books.
How many boys chose animal books?

15. This graph shows the temperature in a greenhouse.


Use the graph to find the time when the temperature was $25^{\circ} \mathrm{C}$.


1 mark

Use the graph to find the difference between the temperature at 2 pm and the temperature at 4 pm .


1 mark
16. Robbie collected information about the colours of some bikes.

Here are his results.

| Colour | Number of bikes |
| :---: | :---: |
| green | 4 |
| red | 7 |
| blue | 12 |
| pink | 3 |

This bar graph shows the information from the table.
Fill in all the missing labels.


2 marks
17. Class 6 count how many seeds they find under two trees.

They show the data in a graph.
$\square$ 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
18. This pie chart shows how the children in Class 6 best like their potatoes cooked.


32 children took part in the survey.
Look at the four statements below.

## For each statement put a tick ( ) if it is correct. <br> Put a cross $\left(\boldsymbol{\sim}_{\text {) if it is not correct }}\right.$

10 children like chips best. $\square$
$25 \%$ of the children like mashed potatoes best. $\square$
$\frac{1}{5}$ of the children like roast potatoes best. $\square$

12 children like jacket potatoes best. $\square$
19. A shop sells different kinds of greeting cards.


This pictogram shows how many they sold in a week.


Estimate how many Birthday cards were sold.


1 mark
Estimate how many more Thank You cards than Get Well cards were sold.


1 mark
20. All the children at Park School chose their favourite soup.

The graph shows the results.


How many more children chose chicken soup than mushroom soup?


1 mark

Robbie says,

## 'More than half of the children chose tomato soup'.

Is he correct?
Circle Yes or No.
Yes / No
Explain how you can tell from the graph.
21. On Monday all the children at Grange School each play one sport.

They choose either hockey or rounders.


There are $\mathbf{1 0 3}$ children altogether in the school.
27 girls choose hockey.
Write all this information in the table.
Then complete the table.

|  | hockey | rounders | Total |
| :---: | :---: | :---: | :---: |
| boys | 22 |  |  |
| girls |  |  | 53 |
| Total |  |  |  |

22. 



These are the prices of sandwiches, drinks and fruit.

| Sandwiches |  | Drinks |  | Fruit |  |
| :--- | ---: | :--- | ---: | :--- | :---: |
| cheese | $£ 1.45$ | milk | $55 p$ | apple | $15 p$ |
| tuna | $£ 1.70$ | cola | $45 p$ | pear | $20 p$ |
| salad | $£ 1.20$ | juice | $65 p$ | melon | $25 p$ |

Shereen buys a tuna sandwich, milk and a pear.
How much does she pay?


1 mark
Mike has 80 p to spend on a fruit and a drink.
What two things can he buy for exactly 80p?
$\qquad$ and $\qquad$
23. Abbie takes the temperature outside at midday on the first day of each month. The graph shows her results from January to December.


How many months on the graph show a temperature between $10^{\circ} \mathrm{C}$ and $\mathbf{2 0}^{\circ} \mathrm{C}$ ?


Find the difference in temperature shown on the graph between July and August.

24. Here is a sorting diagram for numbers.

Write a number less than 100 in each space.

25. A school has a quiz each year.

There are two teams.
Here are their results.


In which year did North beat South by 100 points?


1 mark
In which year did South beat North by the greatest amount?


1 mark
26. This table shows how many journeys a taxi driver made on five days and how much money he collected.

|  | number of <br> journeys | money <br> collected |
| :--- | :---: | :---: |
| Monday | 23 | $£ 85$ |
| Tuesday | 36 | $£ 112$ |
| Wednesday | 18 | $£ 69$ |
| Thursday | 31 | $£ 124$ |
| Friday | 35 | $£ 109$ |

How much money did he collect on the day that he made the most journeys?


1 mark
How much more money did he collect on Monday than on Wednesday?


1 mark
27. Some children ran in two races on sports day.

Here are their times.

|  | $\mathbf{1 0 0 m}$ race | $\mathbf{8 0 0 m}$ race |
| :--- | :---: | :---: |
| Elise | 15.9 seconds | 3 minutes 02 seconds |
| Jake | 19.7 seconds | 2 minutes 58 seconds |
| Teri | 16.8 seconds | 3 minutes 01 seconds |
| Neil | 17.1 seconds | 2 minutes 59 seconds |
| Barry | 18.4 seconds | 2 minutes 57 seconds |

Who finished the 100 m race in second place?


1 mark

In the 800 m race, how many seconds did Barry finish ahead of Elise?


1 mark
28. The pie charts show the results of a school's netball and football matches.


Netball


Football

The netball team played $\mathbf{3 0}$ games.
The football team played $\mathbf{2 4}$ games.

Estimate the percentage of games that the netball team lost.


1 mark

David says,

## 'The two teams won the same number of games'.

Is he correct?
Circle Yes or No.
Explain how you know.
$\qquad$
29. Some children collect cans for recycling.

Here is a chart of how many cans they collect in the first week.


How many cans has Kevin collected?


Alice's target is to collect $\mathbf{3 0}$ cans.
How many more cans does Alice need to reach her target?


1 mark
30. Here is a diagram for sorting numbers.

Write one number in each white section of the diagram.

31. A shop sells greetings cards.

Each card has a price code on it.
These are the codes.

| code | price |
| :---: | :---: |
| AA | $75 p$ |
| BB | $£ 1.15$ |
| CC | $£ 1.55$ |
| DD | $£ 1.70$ |
| EE | $£ 1.99$ |



Tina buys two cards.
One card has code AA on it.
The other card has code DD on it.
How much does Tina pay?


1 mark

Omar buys a card. He pays with a $£ 2$ coin.
He gets 45p change.
What is the code on his card?
32. This graph shows the cost of phone calls in the daytime and in the evening.



How much does it cost to make a 9 minute call in the daytime?


1 mark
How much more does it cost to make a 6 minute call in the daytime than in the evening?


1 mark
33. Tom does a survey of children's favourite breakfast cereals.

These are the results for Class 6


How many more children in Class 6 prefer Choc Grain than Golden Corn?


1 mark

These are the results for Class 5


How many children in both classes like Honey Bites best?


1 mark
34. Here are four triangles drawn on a square grid.


Write the letter for each triangle in the correct region of the sorting diagram.
One has been done for you.

| has a <br> right angle | has an <br> obtuse angle | has <br>  <br> is isosceles |
| :--- | :---: | :---: |

35. 



The table shows the cost of coach tickets to different cities.

|  |  | Hull | York | Leeds |
| :--- | :--- | :---: | :---: | :---: |
| Adult | single | $£ 12.50$ | $£ 15.60$ | $£ 10.25$ |
|  | return | $£ 23.75$ | $£ 28.50$ | $£ 19.30$ |
|  | single | $£ 8.50$ | $£ 10.80$ | $£ 8.25$ |
|  | return | $£ 14.90$ | $£ 17.90$ | $£ 14.75$ |

What is the total cost for a return journey to York for one adult and two children?


1 mark
How much more does it cost for two adults to make a single journey to Hull than to Leeds?


1 mark
36. This graph shows how the weight of a baby changed over twelve months.


From the graph, what was the weight of the baby at $\mathbf{1 0}$ months?


1 mark
How much more did the baby weigh at 5 months than at birth?


1 mark
37. 150 people take part in a walk.

This chart shows the number of people still walking at different times.


Use the chart to estimate the time when two-thirds of the people are still on the walk.


1 mark

What percentage of the people who started are still on the walk at 3pm?

38. This table shows the increase in bus fares.

| Bus Fares |  |
| :---: | :---: |
| old fare | new fare |
| $42 p$ | $48 p$ |
| $52 p$ | $57 p$ |
| $60 p$ | $72 p$ |
| $75 p$ | $85 p$ |
| $90 p$ | $£ 1.05$ |
| $£ 1.20$ | $£ 1.28$ |
|  |  |
|  |  |



Sohan's new bus fare is 72p.
How much has his bus fare gone up?


1 mark

Millie says,
'My bus fare has gone up by 10p'.
How much is Millie's new bus fare?


1 mark
39.


This chart shows the amount of money spent in a toy shop in three months.


How much more money was spent in the shop in December than in November?


1 mark

## Stepan says,

'In November there was a 100\% increase on the money spent in October'.

Is he correct?
Circle Yes or No.
Explain how you can tell from the chart.
$\qquad$
$\qquad$
$\qquad$
40.


This chart shows the musical instruments some children play.

|  | Lena | John | Rashid | Nicola | Yin |
| :---: | :---: | :---: | :---: | :---: | :---: |
| drums | $\sqrt{ }$ | $\sqrt{ }$ |  | $\sqrt{ }$ |  |
| keyboard |  |  | $\sqrt{ }$ |  |  |
| trumpet | $\sqrt{ }$ |  |  |  | $\sqrt{ }$ |
| recorder |  |  | $\sqrt{ }$ | $\sqrt{ }$ | $\checkmark$ |
| piano | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ |  |  |

Who plays both recorder and drums?
$\qquad$

How many children play more than two musical instruments?


1 mark
41. A hot liquid is left to cool in a science experiment.

This graph shows how the temperature of the liquid changes as it cools.


Read from the graph how many minutes it takes for the temperature to reach $40^{\circ} \mathrm{C}$


1 mark
Read from the graph how many minutes the temperature is above $60^{\circ} \mathrm{C}$

42. Write each of these numbers in its correct place on the sorting diagram.

43.


This table shows the numbers of children who went walking, sailing or climbing at an outdoor centre.

|  | May | June | July |
| :---: | :---: | :---: | :---: |
| walking | 25 | 80 | 75 |
| sailing | 15 | 42 | 50 |
| climbing | 18 | 27 | 23 |

How many children went sailing in May, June and July altogether?


How many more children went walking in June than climbing in June?

44.


A camping shop sells tents, sleeping bags and backpacks.

This chart shows how many of each they sold in June.

## Items sold in June



| tents | $\square$ | $\square$ |
| :--- | :--- | :--- |
| sleeping bags | $\square$ | $\square$ |
| backpacks |  | $\square$ |

The shop had $\mathbf{2 0}$ sleeping bags at the beginning of June.
How many of these sleeping bags did the shop have left at the end of June?


1 mark
In July, the shop sold three times as many tents as in June.
How many tents did the shop sell in July?


1 mark
45. Tony and Gemma looked for snails, worms, slugs and beetles in their gardens.


They each made a pie chart of what they found.


Total 80

Gemma's pie chart


Total 36

## Estimate the number of worms that Tony found.



1 mark

Who found more snails?
Circle Tony or Gemma.
Tony / Gemma
Explain how you know.
$\qquad$
$\qquad$
$\qquad$
46.


These are the opening times at a swimming pool.

|  | opening times |  |  |
| :---: | :---: | :---: | :---: |
|  | am |  | pm |
| Monday | Pool closed |  |  |
| Tuesday |  |  |  |
| Wednesday | 10:30 | to | 5:30 |
| Thursday | 10:30 | to | 8:30 |
| Friday | 10:30 | to | 9:00 |
| Saturday | 8:00 | to | 6:00 |
| Sunday | 7:00 | to | 4:00 |

How many hours is the pool open on a Sunday?

Which day has the latest closing time?

Habib arrives at the pool at 5:20pm on Saturday.
How many minutes is it before the pool closes?


1 mark
47. This bar chart shows how many people went to a school play.


Estimate the number of people who went there on Thursday and Friday altogether.


1 mark


Each person paid $£ 2.25$ for a ticket to get in.
How much ticket money was collected on Wednesday?

48. $\quad \boldsymbol{n}$ stands for a number.

Complete this table of values.

49. This table shows the cost of sending a letter.

| Mass | Cost in pence |  |
| :--- | :---: | :---: |
|  | first <br> class | second <br> class |
| up to 60 g | 26 | 20 |
| 61 g to 100 g | 39 | 31 |
| 101 g to 150 g | 49 | 38 |
| 151 g to 200 g | 60 | 45 |
| 201 g to 250 g | 70 | 55 |

Paul is sending a letter.
It costs 38 p second class.
How much would it cost him to send it first class?


1 mark

Jenny has a letter with a mass of $\mathbf{1 7 0 g}$.


What does it cost to send if first class?


1 mark
50. These are the times letters are collected from a post box.

| Monday to Friday | Saturday | Sunday |
| :---: | :---: | :---: |
| 8 am |  | no |
| 2 pm | $11: 30 \mathrm{am}$ | collection |
| $6: 30 \mathrm{pm}$ |  |  |

What is the latest time letters are collected on Wednesday?


1 mark

## Carla posts a letter at $9 \mathbf{a m}$ on Monday.

How long will it be before it is collected?


1 mark

Gareth posts a letter on Saturday at 3pm.
When is it collected from the post box?
$\qquad$ time $\qquad$
51. Tom, Amy and Helen want to go on a boat trip.


There are three boats.

| Lark | Heron | Kestrel |
| :---: | :---: | :---: |
| 50 minute <br> trip | 70 minute <br> trip | 90 minute <br> trip |
| Tickets |  |  |
| £2.75 |  |  |
| each | Tickets <br> £3.50 <br> each | Tickets <br> £4.20 <br> each |

How much does it cost altogether for three people to go on the Lark?


1 mark

Tom and Amy go on the Heron.
They leave at 2:15pm.
At what time do they return?


1 mark

Helen goes on the Kestrel and gets back at 4:15pm.
At what time did the boat leave?


1 mark
52. Three children do a sponsored silence.


This is a chart of the money they collected.


Estimate how much Sheena collected.


1 mark

Together Gary and Pip collected more than £60.
Explain how the chart shows this.
$\qquad$
$\qquad$
$\qquad$
53. This table shows the distances in kilometres between five towns.


Use the table to find the distance from London to Manchester.


James goes from Newcastle to Birmingham, and then on to Cardiff.
How many kilometres does he travel?

54. Gavin was ill in March.


This is his temperature chart.

Gavin's temperature chart


For how many days was his temperature marked as more than $37^{\circ} \mathrm{C}$ ?


1 mark

Which date showed the largest change in temperature from the day before?


1 mark

Estimate Gavin's highest temperature shown on the graph.
Give your answer to $\mathbf{1}$ decimal place.


1 mark
55. Kelly chooses a section of a newspaper.

It has $\mathbf{5 0}$ words in it.
She draws a bar chart of the number of letters in each word.


## What fraction of the 50 words have more than 6 letters?



1 mark

Kelly says,
23 of the 50 words have less than 5 letters.
This shows that nearly half of all the words used in the newspaper have less than 5 letters in them.

Explain why she could be wrong.

