## White <br> Year 5 <br> R@se <br> Maths Statistics

The graph shows the number of cars sold by two different companies.


- How many more cars did Ace Motors sell than Briggs in April?
- From January to March, how many cars did each company sell? Who sold more? How many more did they sell?
- Crooks Motors sold 250 more cars than Briggs each month.

Plot Crooks Motors' sales on the graph.

Match the graph to the activity.


A car travels at constant speed on the motorway.

A car is parked outside a house.

A car drives to the end of the road and back.

## Encourage the children to collect their own data and

 present it as a line graph.As this objective is taken from the science curriculum, it would be a good idea to link it to investigations.

Possible investigations could be:

- Measuring shadows over time
- Melting and dissolving substances
- Plant growth

Here is a table of data.

| Time <br> $(\mathrm{min})$ | 15 | 30 | 45 | 60 | 75 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Distance <br> $(\mathrm{km})$ | 25 | 46 | 67 | 72 | 98 |

Which intervals would be the most appropriate for the vertical axis of the line graph?

Explain your answer.

Rosie has used the data in the table to plot the line graph.

| Time | $11: 00$ | $11: 20$ | $11: 40$ | $12: 00$ | $12: 20$ | $12: 40$ | $13: 00$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Height above <br> ground $(\mathrm{m})$ | 0 | 180 | 150 | 200 | 210 | 120 | 0 |

What mistakes has Rosie made?

Can you draw the line graph correctly?


| Time | $11: 00$ | $11: 20$ | $11: 40$ | $12: 00$ | $12: 20$ | $12: 40$ | $13: 00$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Height above <br> ground $(\mathrm{m})$ | 0 | 180 | 150 | 200 | 210 | 120 | 0 |

Carry out your own exercise experiment and record your heart rate on a graph like the one shown in the section above. How does it compare?


Can you make a set of questions for a friend to answer about your graph?

Can you put the information into a table?

Here is a line graph showing a bath time. Can you write a story to explain what is happening in the graph?


## How long did it take to fill the bath?

 How long did it take to empty?The bath doesn't fill at a constant rate. Why might that


|  | 100 m <br> sprint $(\mathrm{s})$ | Shot put <br> $(\mathrm{m})$ | 50 m Sack <br> race $(\mathrm{s})$ | Javelin <br> $(\mathrm{m})$ |
| :---: | :---: | :---: | :---: | :---: |
| Amir | 15.5 | 6.5 | 18.9 | 11.2 |
| Dora | 16.2 | 7.5 | 20.1 | 13.3 |
| Teddy | 15.8 | 6.9 | 19.3 | 13.9 |
| Rosie | 15.6 | 7.2 | 18.7 | 14.1 |
| Ron | 17.9 | 6.3 | 18.7 | 13.3 |

Ron thinks that he won the 100 m sprint because he has the biggest number.
Do you agree?
Explain your answer.

This table shows the 10 largest stadiums in Europe.

| Stadium | City | Country | Capacity |
| :---: | :---: | :---: | :---: |
| Camp Nou | Barcelona | Spain | 99,365 |
| Wembley | London | England | 90,000 |
| Signal Iduna Park | Dortmund | Germany | 81,359 |
| Santiago Bernabeu | Madrid | Spain | 81,044 |
| San Siro | Milan | Italy | 80,018 |
| Stade de France | Paris | France | 80,000 |
| Luzhniki Stadium | Moscow | Russia | 78,300 |
| Ataturk Olimpiyat Stadium | Istanbul | Turkey | 76,092 |
| Old Trafford | Manchester | England | 75,811 |
| Allianz Arena | Munich | Germany | 75,000 |

## True or False?

- The fourth largest stadium is the San Siro.
- There are 6 stadiums with a capacity of more than 80,000
- Three of the largest stadiums are in England.

This table shows how many children own dogs and cats.
Fill in the missing gaps and answer the questions below.

|  | Boys | Girls | Total |
| :---: | :---: | :---: | :---: |
| Dogs |  | 44 |  |
| Cats | 38 |  |  |
| Total | 125 |  | 245 |

- How many more boys have dogs than girls?
- How many more girls have cats than dogs?
- How many more children have dogs than cats?


## 120 people were asked where they went on

 holiday during the summer months of last year. Use this information to create a two-way table.

In June, 6 people went to France and 18 went to Spain.
In July, IO people went to France and 19 went to Italy.
In August, 15 people went to Spain.
35 people went to France altogether.
39 people went to Italy altogether.
35 people went away in June.
43 people went on holiday in August.

Ron wants to watch the following TV programmes:

Cheese Please, What's the Q, aMAZEment, Budget Baker, Safari, Dance \& Decide.

Will Ron be able to watch all the shows he has chosen?

It is $\mathrm{I} 8: 45$. How long is it until 'Guess the Noise' is on?

| NatureWatch |  | NatureWatch + |  | QuizTime |  | Cookery Channel |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 p.m. | News | 5 p.m. | Puppy Playtime | 5 p.m. | Talk the Talk | 5 p.m. | Cheese Please |
| $5: 30$ p.m. | Weather | 6 p.m. | News | $5: 30$ p.m. | Quizdom | 6 p.m. | Cook with <br> Lydia |
| 5:45 p.m. | Deep Blue | $6: 30$ p.m. | Weather | 6 p.m. | What's the Q? | $6: 30$ p.m. | Pizza Pasta <br> Pietro |
| 6 p.m. | Pampered Pets | $6: 45$ p.m. | Deep Blue | $6: 30$ p.m. | aMAZEment | $6: 45$ p.m. | 5 Minute Menu |
| 7 p.m. | Safari | 7 p.m. | Pampered Pets | $7: 30$ p.m. | Buzzed Out | 7 p.m. | Budget Baker |
| 8:15 p.m. | Animal Antics | 8 p.m. | Safari | 8 p.m. | Guess the <br> Noise | 8 p.m. | Lots of Lollies |
| 9:15 p.m. | Worldly <br> Wonders | $9: 15$ p.m. | Animal Antics | 9 p.m. |  <br> Decide | $9: 15$ p.m. | Biscuit Bites |

Here is Rosie's weekly timetable from secondary school.

| Y7C <br> Mc |  | $\begin{gathered} 1 \\ 09: 15 \\ 09: 55 \end{gathered}$ | $\begin{gathered} 2 \\ 09: 55 \\ 10: 45 \end{gathered}$ |  | $\begin{gathered} 3 \\ 11: 05 \\ 11: 55 \end{gathered}$ | $\begin{gathered} 4 \\ \text { I 1:55 } \\ \text { I } 2: 45 \end{gathered}$ |  | $\begin{gathered} 5 \\ 13: 45- \\ 14: 35 \end{gathered}$ | $\begin{gathered} 6 \\ 14: 35 \\ 15: 25 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Monday |  | Literacy | English |  | Maths | I.C.T. |  | P.S.H.C.E. | Geography |
| Tuesday |  | English | Art |  | French | Science |  |  |  |
| Wednesd ay |  | Literacy | D.T. |  | Art | Drama |  | I.C.T. | Science |
| Thursday |  | P.E. | Maths |  | R.E. | English |  | History | P.S.H.C.E. |
| Friday |  | Literacy | Maths |  | Art | Science |  |  |  |

## True or False?

- Rosie has 2 hours and 20 minutes of PE in a week.
- Rosie has 130 minutes of literacy in a week.
- Rosie does Art for the same length of time as Maths each week.
- Rosie does Art for the same length of time as English each week.

