## Unit 4: Graphs and tables

## Lesson I: Interpreting tables

## $\rightarrow$ pages 90-92

1. a) 799
b) Friday
c) 103
d) Monday and Wednesday
e) Isla is not correct; $192 \times 2=384$
2. a) thread snake
b) 6.5 m
c) 4 m
d) The acrochordus is half the length of the cobra.
3. Bus $=71$

The difference between the number of children who travel by bus and the number of children who walk to school is 83 .
4. $8+9+7.5+4+1 \cdot 5=30$
$30 \times 15=450$
In total, Toshi gets paid $£ 450$.

## Reflect

Answers will vary; for example:
50 cars were in the survey.
The difference between the number of black cars and red cars is 14 .
There were more black than red and white cars put together.

## Lesson 2: Two-way tables

## $\rightarrow$ pages 93-95

1. a)

|  | Spots | Stripes | Solid black |
| :--- | :--- | :--- | :--- |
| Square | III | II | I |
| Triangle | II | 丹\# I | I |
| Star | III | II | II |

b)

|  | Spots | Stripes | Solid black | Total |
| :--- | :--- | :--- | :--- | :--- |
| Square | 3 | 2 | 1 | 6 |
| Triangle | 2 | 6 | 1 | 9 |
| Star | 3 | 2 | 2 | 7 |
| Total | 8 | 10 | 4 | 22 |

c) 8 shapes have spots.

I worked this out by looking at the total of the spots column.
2. a)

|  | Girl | Boy | Total |
| :--- | :--- | :--- | :--- |
| Brown | 3 | 10 | 13 |
| Blue | 7 | 5 | 12 |
| Total | 10 | 15 | 25 |

b) 13
c) 4
d) $\frac{10}{25}$ or $\frac{2}{5}$.
3. a)

|  | Rabbits | Guinea Pigs | Hamsters | Total |
| :--- | :--- | :--- | :--- | :--- |
| Petz R Us | 24 | 15 | 49 | 88 |
| Animals | 52 | 17 | 26 | 95 |
| We Love Pets | 28 | 51 | 13 | 92 |

b) We Love Pets
c) Animals
d) 275
4. a)

|  | Walk | Cycle | Car | Other | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Boys | 7 | 3 | 4 | 1 | 15 |
| Girls | 8 | 1 | 3 | 0 | 12 |
| Total | 15 | 4 | 7 | 1 | 27 |

b) 11
c) Mrs Dean is correct because double 15 is 30 , which is greater than 27.

## Reflect

Answers will vary. Children should appreciate that twoway tables are used to show data against two criteria.

## Lesson 3: Interpreting line graphs (I)

## $\rightarrow$ pages 96-98

1. a) 2 pm
b) 20
c) $20,7,10,25,0$
d) 18
e) The pool was closed (though children might suggest other reasons).
2. a) $\operatorname{Day} 7$
b) 390 (approximately)
c) 210 (approximately)
d) $340 \mathrm{~km}+285 \mathrm{~km}+410 \mathrm{~km}=1,035 \mathrm{~km}$
e) The graph starts at 180 km as the shortest distance travelled is 190, so you don't need to show 0-180 km.
3. 60 (approximately)

## Reflect

Explanations will vary. Children should explain that they would need to identify the time on the horizontal axes and then look vertically upwards to see what temperature the graph shows at this point. To work out the value of the temperature, they will need to look horizontally to read the temperature from the vertical axis.

## Lesson 4: Interpreting line graphs (2)

## $\rightarrow$ pages 99-101

1. a) 22
b) 5
c) 3 and 11.75
d) The balloon bursts after 10 seconds because, at this point, its height starts to drop quickly.
e) 10
2. a) 7
b) 7
c) 2 pm and 5:30 pm
d) 6
e) 3
3. Approximately 19,500 (about 18,000 to 37,500 ).

## Reflect

The statement is sometimes true. Children's explanations will vary; for example:
A temperature graph could start from below zero if it were recording temperatures in winter, whereas a graph measuring the height of a hot air balloon would start at zero. This shows that some line graphs will start from zero but not all.

## Lesson 5: Drawing line graphs

## $\rightarrow$ pages 102-104

1. a)

b) Week $8=8.5$
2. 


3.

4. a)

| Day | Mon | Tue | Wed | Thur | Fri |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Number of <br> packed lunches | 16 | 21 | 26 | 26 | 7 |

b) Graphs that children will draw may vary; for example:


## Reflect

Answers will vary; for example:

1. Label the axes.
2. Make sure the numbers are equally spaced along the axes.
3. Draw a dotted line when there is no measured data between points.

## End of unit check

## $\rightarrow$ pages 105-107

## My journal

1. a) 12-16 people because the graph shows 16 people were there at 3 pm and 12 people were there at 4 pm. (Allow approximately 14 people.)
b) 7 pm because there are no people in the shop after that time.
c) Answers will vary; for example:

The shop might open at 9 am ; the shop is busiest at 1 pm ; there are 22 people in the shop at 12 pm ; etc.
2. a) A line graph would not work because there are different types of clothes.
b) Answers will vary; for example:

Shorts were sold the most; swimwear was sold the least; people bought more T-shirts than trainers; etc.

## Power puzzle

|  | First | Second | Total |
| :--- | :--- | :--- | :--- |
| Red | 34 | 26 | 60 |
| Blue | 16 | 74 | 90 |
| Total | 50 | 100 | 150 |

There are 58 more blue counters in the second box.

