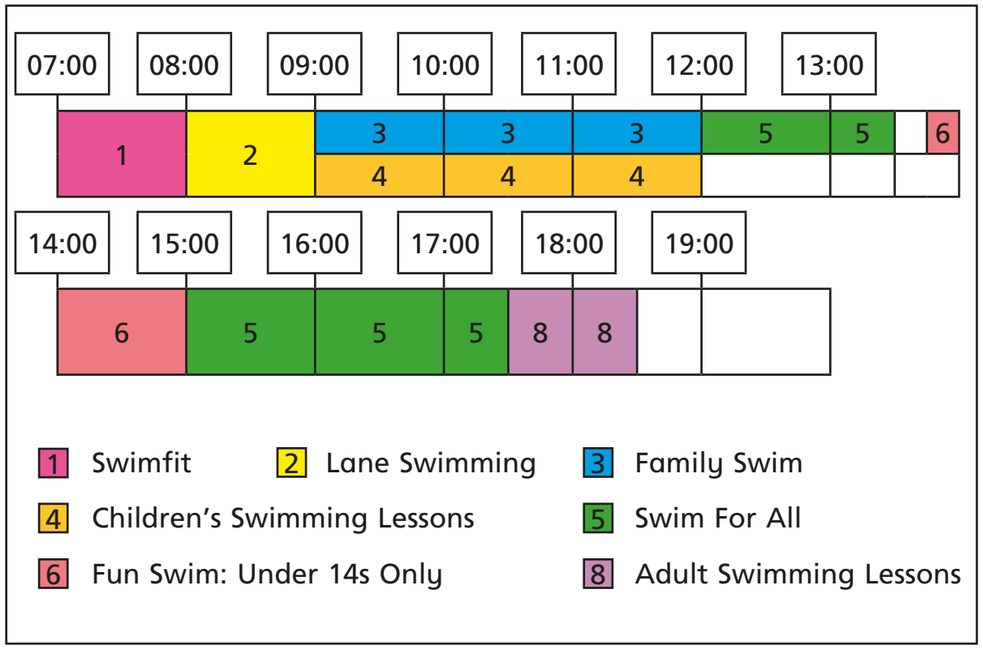
Timetables

1 Here is the Saturday timetable for the main pool at a local leisure centre.



a) Is this true or false?

The Family Swim session starts at 9 o'clock in the morning.

_____

b) How long does the Swimfit session last? _____

c) During the day how much time is allocated to Swim for All sessions?

_____

d) Why is the time between 9:00 and 12:00 divided into two?

Talk about it with a partner.

2 Draw a timetable for today's lessons at school.

You should include breaks and lunchtime.

Add another row to your timetable to show what lessons you have tomorrow.

What things stay the same and what things change every day?

3 Here is part of a bus timetable showing the journey from the bus station to the train station.

	1st bus	2nd bus
Bus station	10:30	12:15
High Street	10:42	12:27
Green Lane	10:45	12:30
School	10:56	
Four Lane End	11:07	
Library	11:12	
Train station	11:25	

It takes the 2nd bus the same time to travel between each stop.

Complete the timetable.

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4 This is the train timetable from Leeds to London.

Leeds	12:15	12:45	13:15	13:45	14:15
Wakefield	12:28	12:58	13:28	13:58	14:28
Doncaster	12:47	13:19	13:47	14:19	14:47
Grantham	13:18	—	14:18	—	15:18
Peterborough	—	14:10	—	15:10	—
Stevenage	14:04	—	15:04	—	16:04
London	14:31	15:01	15:31	16:01	16:31

a) What time does the 12:45 from Leeds arrive in London?

b) How long does the 13:58 train from Wakefield take to get to London?

_____

c) At which stations does the 14:15 train stop?

_____

_____

d) How long does it take to get from Grantham to Stevenage?

_____

e) If you arrive in Grantham at 13:30, how long will you need to wait before the next train to London?

_____

5 Here is a local bus timetable.

High Street	09:15	09:35	09:55	10:15
Library	09:30	09:50	10:10	10:30
Willow Park	09:47	10:07	10:27	10:47
Bank Road	10:05	10:25	10:45	11:05
Shop-A-Lot Centre	10:20	10:40	11:00	11:20

a) Dexter misses the 09:15 bus by 3 minutes.

He needs to be at Bank Road by 10:30

Is he still able to make it? _____

Explain your answer.

_____

_____

b) Annie catches the 10:10 bus.

What time does she arrive at the Shop-A-Lot Centre? _____

c) Teddy says he never has to wait more than 20 minutes for a bus.

Is this true? _____

Explain your answer.

_____

_____

_____

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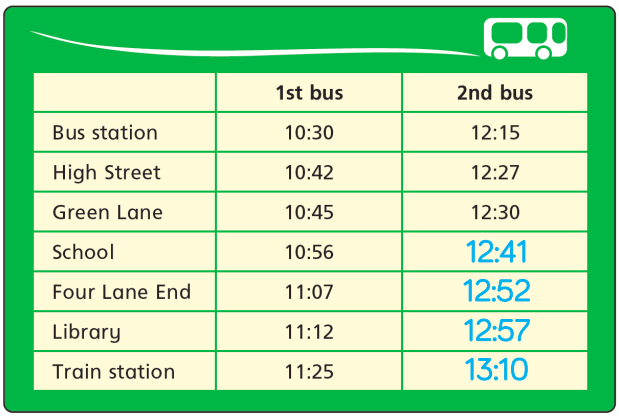
Y5 – Autumn – Block 3 – Step 6 – Timetables Answers

Question	Answer
1	a) true b) 1 hour c) 4 hours d) Part of the pool is used for children's swimming lessons and the rest of the pool is used for Swim for All.
2	student's timetable for one day The times of lessons, breaks and lunchtime are the same every day, but the subjects in each lesson may be different.
3	
4	a) 15:01 b) 2 hours 3 minutes c) Leeds, Wakefield, Doncaster, Grantham, Stevenage, London d) 46 minutes e) 48 minutes
5	a) Yes. He can catch the 09:35 bus, which gets to Bank Road at 10:25 b) 11:00 c) Yes. The buses run every 20 minutes, so if he just misses a bus the longest wait will be 20 minutes.

	1st bus	2nd bus
Bus station	10:30	12:15
High Street	10:42	12:27
Green Lane	10:45	12:30
School	10:56	12:41
Four Lane End	11:07	12:52
Library	11:12	12:57
Train station	11:25	13:10

Interpret charts

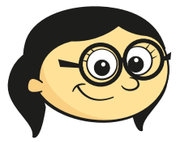
1 The pictogram shows the number of ice creams sold in a shop.

Ice cream flavour	Number of ice creams sold
vanilla	
chocolate	
strawberry	
mint choc	

Key = 2 ice creams

a) How many vanilla ice creams were sold?

b)



The shop sold 6 chocolate ice creams.

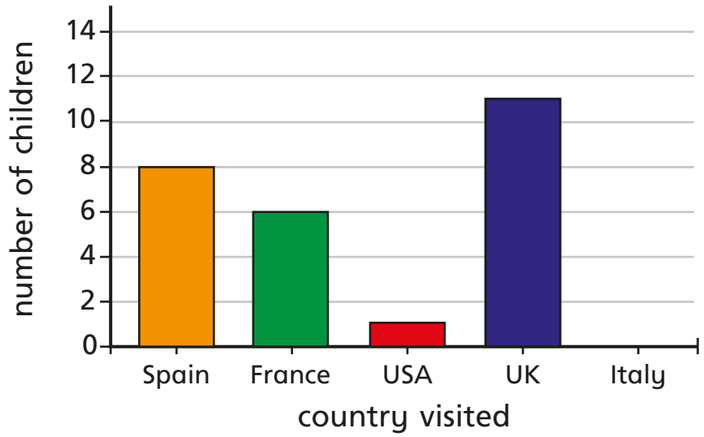
What mistake has Annie made?

c) How many chocolate ice creams were sold?

d) How many strawberry ice creams were sold?

e) Seven mint choc ice creams were sold.
Complete the pictogram to show this.

2 The bar chart shows the number of children who went on holiday to some different countries.



a) Complete the table using the information in the bar chart.

Country	Number of children visiting
Spain	
France	
USA	
UK	
Italy	

b) Complete the pictogram using the information in the bar chart.

Country	Number of children visiting
Spain	
France	
USA	
UK	
Italy	

Key = 4 children

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3

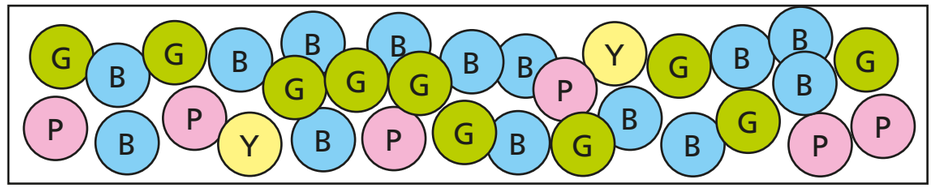


Chart A

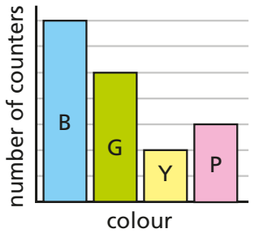


Chart B

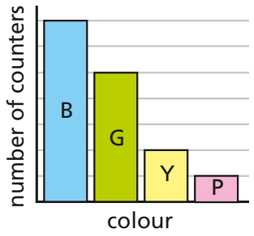
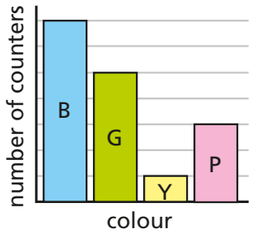


Chart C



Which chart best represents the picture? _____

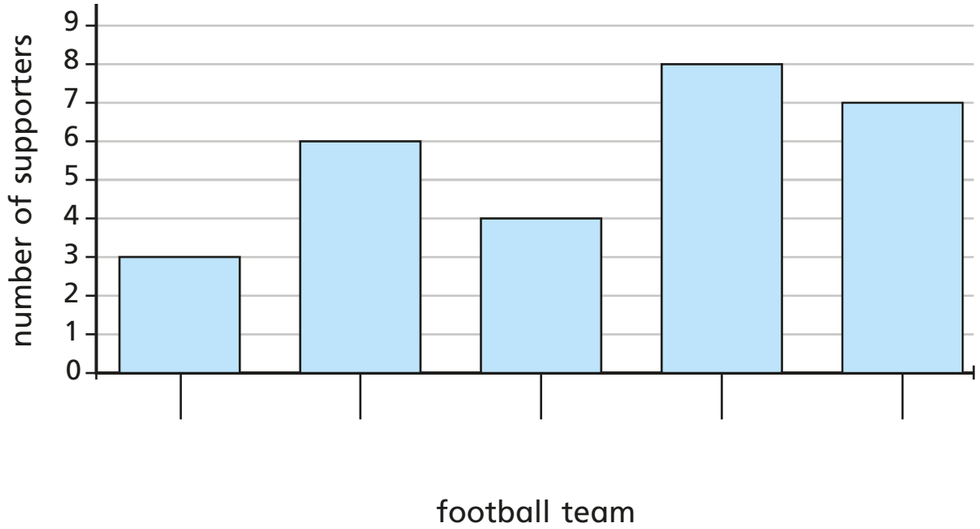
Talk to a partner about the reasons for your choice.

4

Use the clues to label the bar chart.

- The number of Huddersfield Town supporters is half the number of Halifax Town supporters.
- More people support Halifax Town than support any other team.
- More people support Manchester United than Leeds United.
- There is 1 less supporter of Bradford City than Halifax Town.

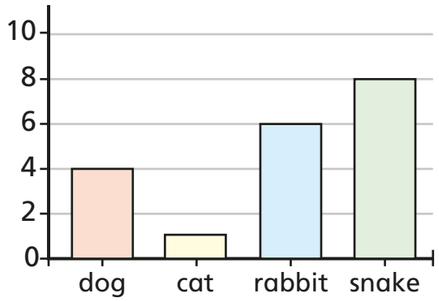
Bradford City | Huddersfield Town | Halifax Town | Leeds United | Manchester United



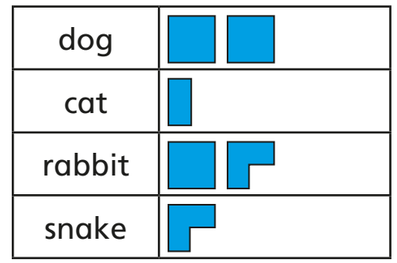
5

Four classes of children were asked what their favourite animals are. Match the tables to the charts.

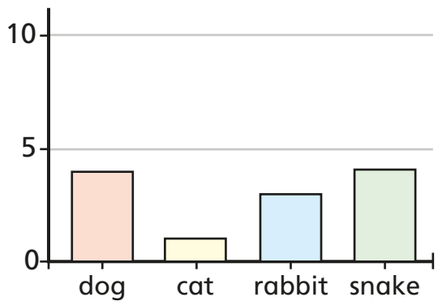
Class A	
dog	8
cat	2
rabbit	7
snake	12



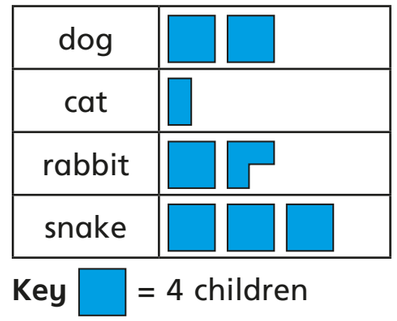
Class B	
dog	4
cat	1
rabbit	3
snake	4



Class C	
dog	4
cat	1
rabbit	6
snake	8



Class D	
dog	8
cat	2
rabbit	7
snake	3



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Y4 – Summer – Block 4 – Step 1 – Interpret charts Answers

Question 1

a) 8

b) She has counted the number of pictures of ice creams on the pictogram, but each picture represents 2 ice creams.

c) 12

d) 3

e)

Ice cream flavour	Number of ice creams sold
vanilla	
chocolate	
strawberry	
mint choc	

Question 2

a)

Country	Number of children visiting
Spain	8
France	6
USA	1
UK	11
Italy	0

b)

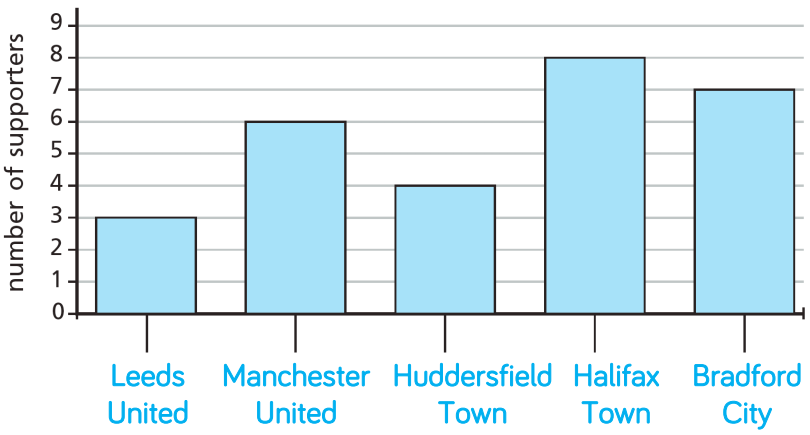
Country	Number of children visiting
Spain	
France	
USA	
UK	
Italy	

Question 3

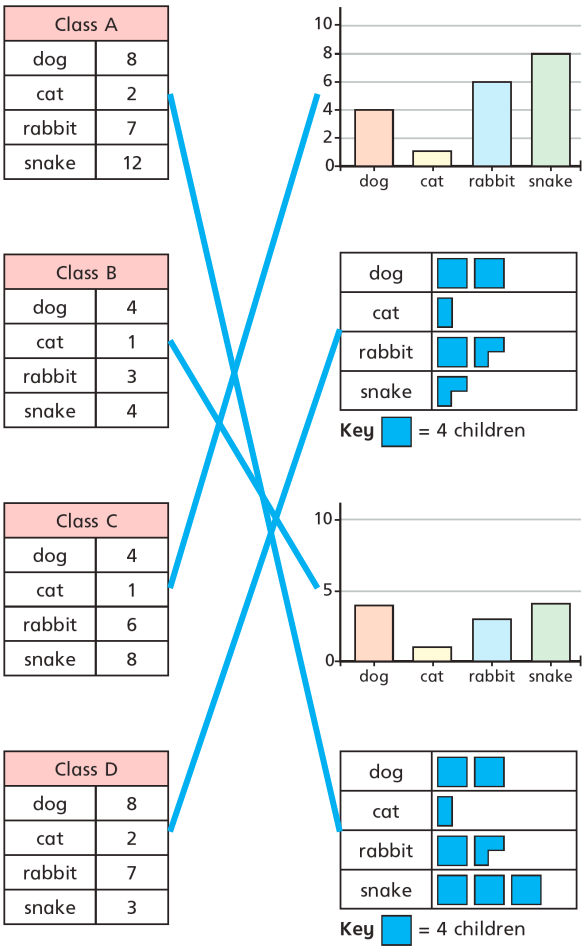
chart C

There are 14 blue, 10 green, 2 yellow and 6 pink. If each division on the vertical axis is equal to 2 counters, then the columns in chart C show these numbers.

Question 4

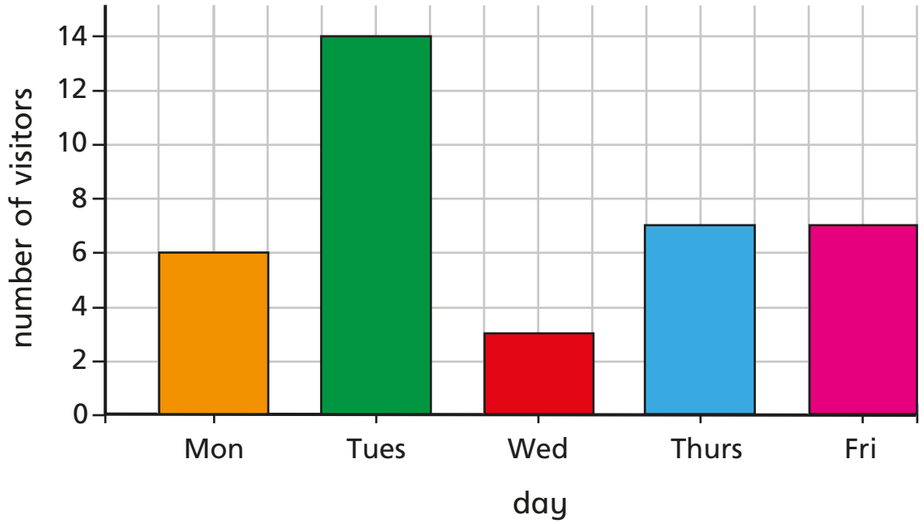


Y4 – Summer – Block 4 – Step 1 – Interpret charts Answers (continued)

Question	Answer
5	

Comparison, sum and difference

1 The bar chart shows the number of visitors to a museum in a week.



a) How many more visitors went to the museum on Tuesday than on Wednesday?

b) What is the difference between the number of visitors on Monday and the number of visitors on Friday?

c) What was the total number of visitors for the whole week?

d) If there were 3 times as many visitors on Saturday as there were on Thursday, how many people visited on Saturday?

2 The pictogram shows the points scored in a game by five teams.

Team	Points
Red	■ ■ ■ ▮
Blue	■ ⌐
Green	■ ■ ▮
Yellow	■ ■ ■ ■ ▪
Pink	

Key ■ = 4 points

a) Write <, > or = to compare the points scored by the teams.

Red ◯ Blue and Green

Red and Blue ◯ Green and Yellow

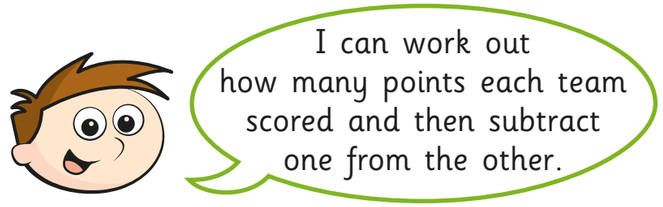
Red and Green ◯ Yellow and Blue

Blue and Green ◯ Yellow

b) The Pink team scored half the number of points that the Green team scored.

Complete the pictogram for the Pink team.

c) Teddy is working out the difference in points between the Red and Green teams.



Is there another way Teddy could work out the answer?

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3 Two children are asked to find out how many hours of sunshine there were altogether.

Country	Number of hours sunshine
Spain	☀☀☀☀☀☀
UK	☀☀☀
Italy	☀☀☀☀☀
Germany	☀☀☀
Iceland	☀

Key ☀ = 3 hours

a)

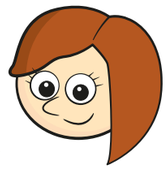
I can find out how many hours sunshine each country has and then add up all the totals.

Use Mo's method to calculate the total hours of sunshine.

☐ hours

b)

I can count how many sunshine symbols there are altogether and multiply that by 3



Use Rosie's method to calculate the total hours of sunshine.

☐ hours

Which method is the most efficient?

Will that always be the case?

4 The table shows the number of men and women who watched three different films.

Film	Women	Men	Total
A	364	618	
B	411		895
C	609	255	
Total		1,357	

a) Complete the table.

b) Are these statements true or false?

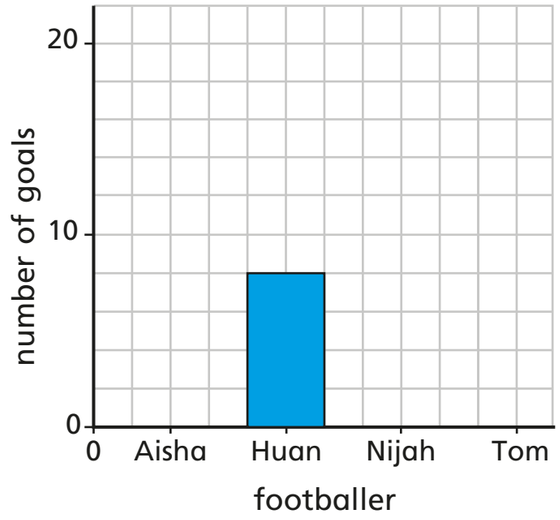
More women than men watched one of the films. _____

Film B was the most popular. _____

5 The bar chart represents the number of goals scored by four footballers.

Use the clues to complete the bar chart.

- Tom has scored 13 fewer goals than Aisha.
- Aisha has scored twice as many goals as Huan.
- Huan and Nijah combined have scored a total of 20 goals.



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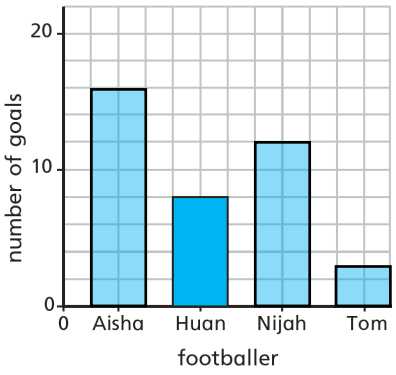
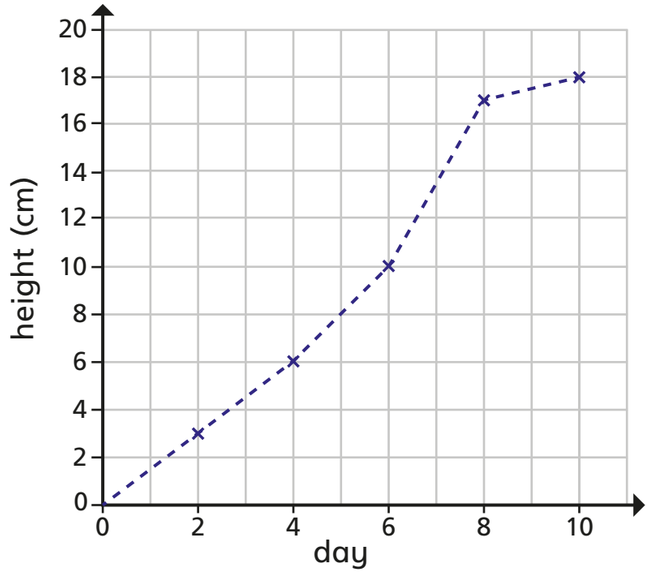
Y4 – Summer – Block 4 – Step 2 – Comparison, sum and difference Answers

<table>
<tr><th>Question</th><th>Answer</th></tr>
<tr><td>1</td><td>a) 11
b) 1
c) 37
d) 21</td></tr>
<tr><td>2</td><td>a) Red < Blue and Green
Red and Blue < Green and Yellow
Red and Green = Yellow and blue
Blue and Green = Yellow
b)
<table>
<tr><th>Team</th><th>Points</th></tr>
<tr><td>Red</td><td></td></tr>
<tr><td>Blue</td><td></td></tr>
<tr><td>Green</td><td></td></tr>
<tr><td>Yellow</td><td></td></tr>
<tr><td>Pink</td><td></td></tr>
</table>
Key = 4 points
c) Teddy could subtract the square and a half for Green from the squares for Red to leave 2 whole squares and then convert these to 8 points.</td></tr>
<tr><td>3</td><td>a) 54 hours
b) 54 hours
Rosie's method is more efficient when all the symbols are whole symbols. When there are part symbols representing less than 3 hours then it is harder to work out how many symbols there are in total.</td></tr>
<tr><td>4</td><td>a)
<table>
<tr><th></th><th>Women</th><th>Men</th><th>Total</th></tr>
<tr><td>Film A</td><td>364</td><td>618</td><td>982</td></tr>
<tr><td>Film B</td><td>411</td><td>484</td><td>895</td></tr>
<tr><td>Film C</td><td>609</td><td>255</td><td>864</td></tr>
<tr><td>Total</td><td>1,384</td><td>1,357</td><td>2,741</td></tr>
</table>
b) true
false</td></tr>
<tr><td>5</td><td> 
</td></tr>
</table>

Introducing line graphs

1 The line graph shows the growth of some cress over 10 days.



a) How tall was the cress on Day 2? ☐ cm

b) On what day did the cress reach 10 cm? day ☐

c) Estimate the height of the cress on Day 5 ☐ cm

d) Estimate when the cress will reach a height of 14 cm.

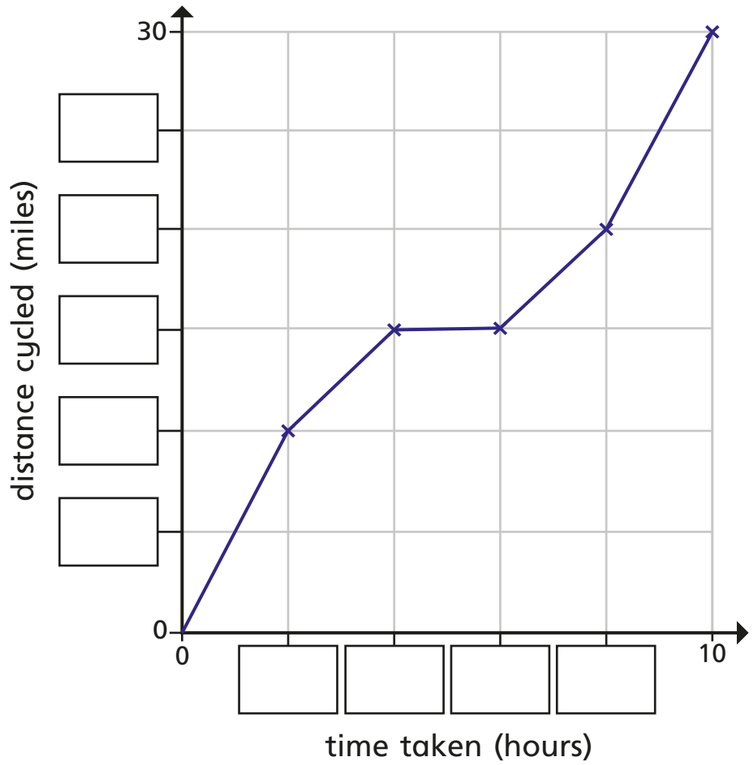
day ☐

e) Between which two consecutive days did the cress grow the most?

day ☐ and day ☐

2 The line graph shows the distance a cyclist travels on a bike ride.

a) Fill in the missing labels.



b) How long did it take the cyclist to travel 10 miles?

☐ hours

c) How far had the cyclist travelled after 4 hours?

☐ miles

d) How far did the cyclist travel in total?

☐ miles

e) How far did the cyclist travel between 4 and 6 hours?

☐ miles

What might have happened during this time?

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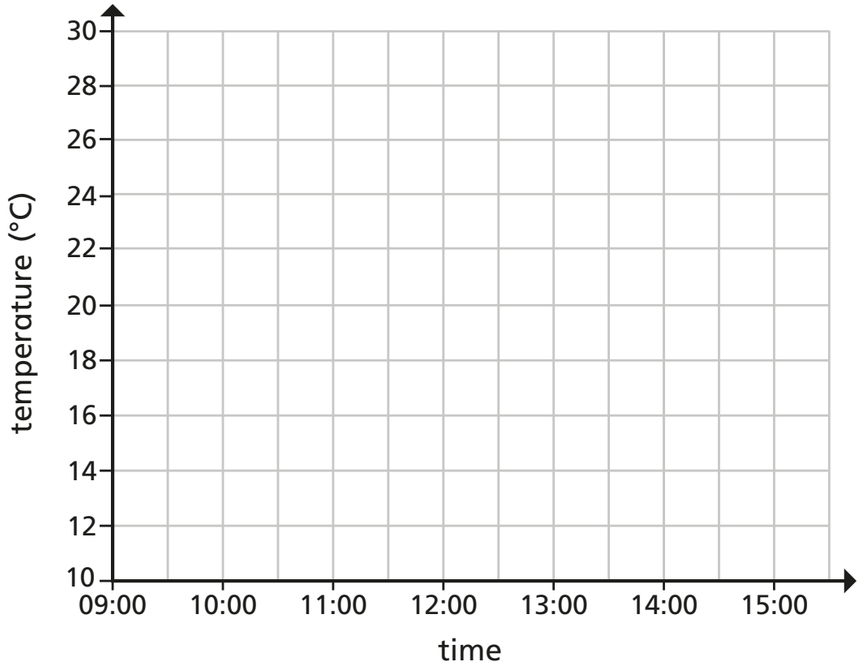
3 The table shows the temperature outside on Monday.

Time	09:00	10:00	11:00	12:00	13:00	14:00	15:00
Temperature (°C)	14	16	20	26	24	20	18

a) Use the information in the table to complete the line graph.



Key Monday _____ Tuesday _____

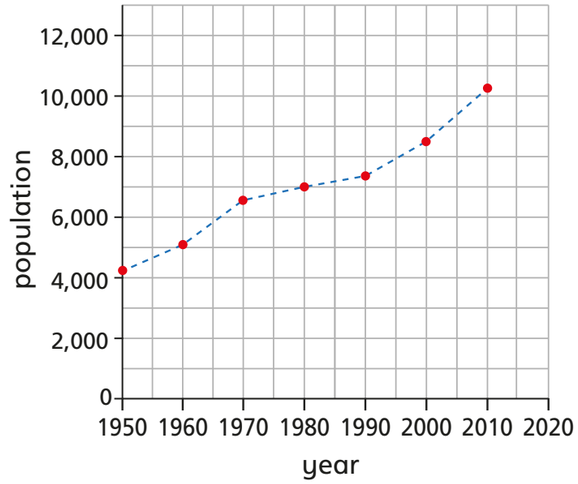
b) On Tuesday, the following temperatures were recorded.

Time	09:00	10:00	11:00	12:00	13:00	14:00	15:00
Temperature (°C)	13	16	21	22	22	19	17

Add the new information to your line graph using a different colour and complete the key.

c) At what time was it hotter on Tuesday than on Monday?

4 The graph shows the population of a town from 1950 to 2010



a) Circle the correct word to complete the statement.

The population of the town **increased** / **decreased** from 1950 to 2010

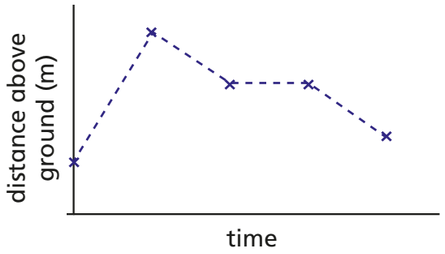
b) Estimate the highest recorded population.

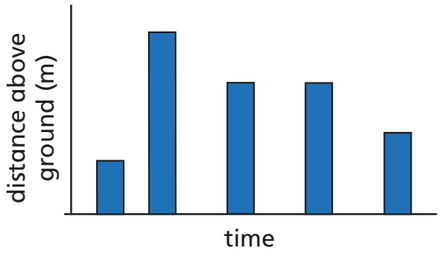
c) In what year did the population first reach 7,000?

d) Estimate the population in 1970

e) Estimate the population in 2006

5 The line graph and bar chart both show the distance above ground of a bird.





Which representation is more appropriate? _____

Explain your choice to a partner.

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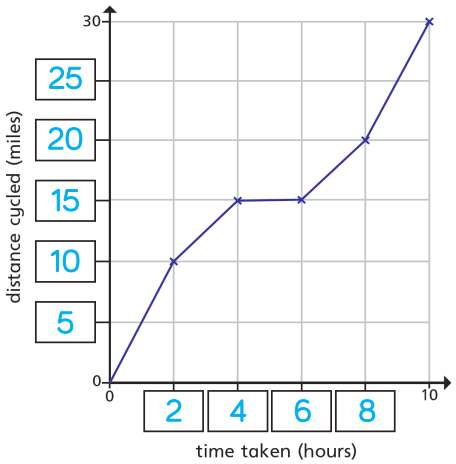
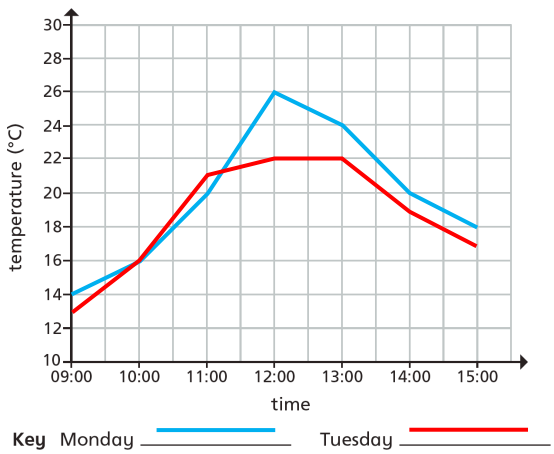
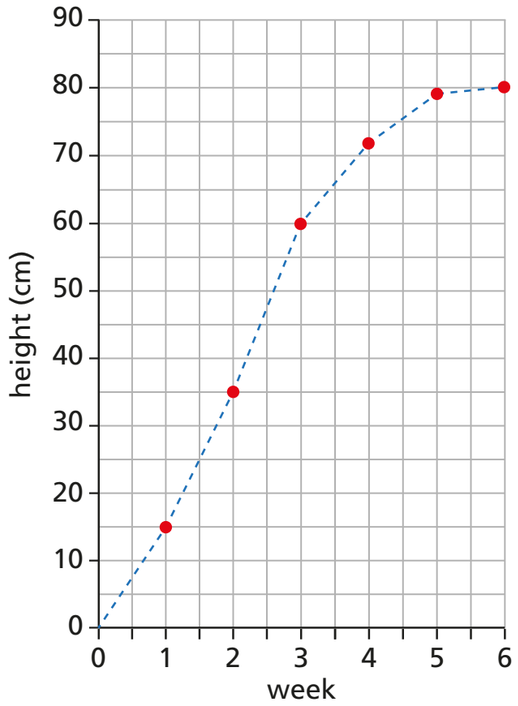
Y4 – Summer – Block 4 – Step 3 – Introducing line graphs Answers

Question	Answer
1	a) 3 cm b) day 6 c) 8 cm d) day 7 e) day 6 and day 7 **or** day 7 and day 8
2	a)  b) 2 hours c) 15 miles d) 30 miles e) 0 miles The cyclist might have stopped for a rest or to eat something.
3	a), b)  c) 11:00
4	a) The population of the town **increased** / **decreased** from 1950 to 2010 b) 10,200 c) 1980 d) 6,500 e) 9,500
5	line graph The line graph is more appropriate because the bird is moving all the time, so the distance above the ground is always changing.

Read and interpret line graphs

1 The graph shows the height of a sunflower on the first day of each week for 6 weeks.



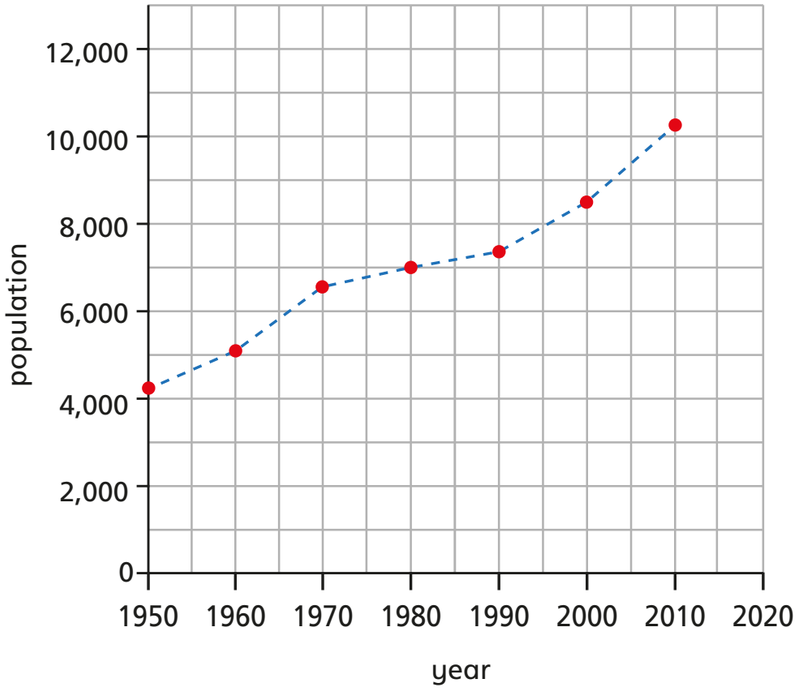
a) What is the height of the sunflower at the start of week 3?

b) What is the height of the sunflower at the start of week 2?

c) Eva thinks the height of the sunflower at the start of week 4 is 75 cm. Explain why Eva is wrong.

d) By how much does the sunflower grow from the start of week 3 to the start of week 6?

2 The graph shows the population of a town at the end of each decade from 1950 to 2000



a) What was the population at the end of 1980?

b) What was the population at the end of 2000?

c) Can you accurately tell the population in 1991? Why?

d) Which decade had the least population increase? _____

e) Predict the population at the end of 2020

Compare answers with a partner.

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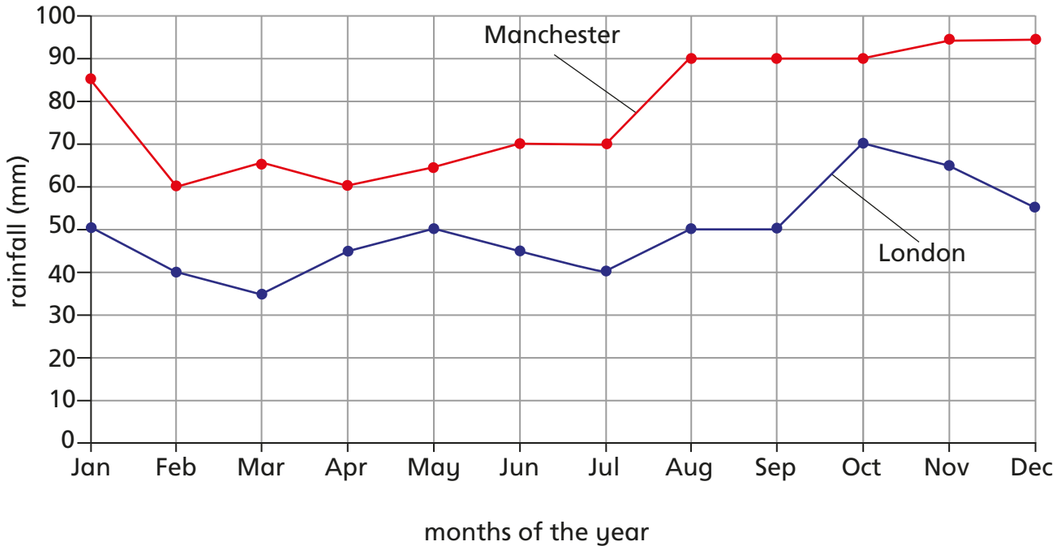
3 This graph shows the average rainfall in London and Manchester to the nearest 5 mm.



a) How many millimetres of rain falls in London in May? ☐

b) Which months are the driest in Manchester?

_____

c) Which is the wettest month in London? _____

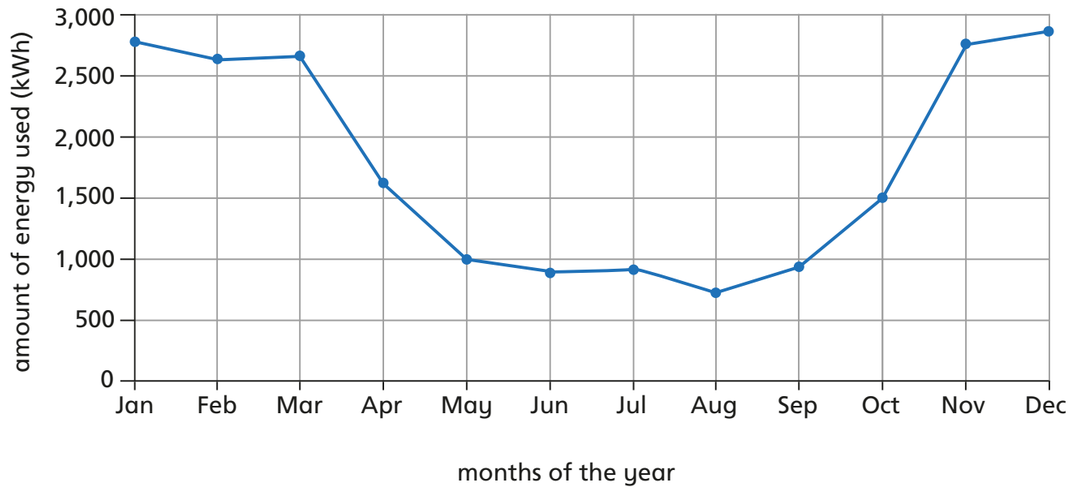
d) In January, how much more rainfall is there in Manchester than London? ☐

e) How many months does it rain more than 50 mm in London and Manchester? ☐

f) How much more rainfall is there in Manchester than London in December? ☐

4 Energy is measured in kWh (kilowatt hours).

This graph shows the amount of energy being used at different times of the year in one household.



Describe three things that you know from looking at the graph.

_____

_____

_____

Describe three things that you could find out from the graph.

_____

_____

_____

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Y5 – Autumn – Block 3 – Step 1 – Read and interpret line graphs Answers

Question	Answer
1	a) 60 cm b) 35 cm c) She has read the intervals between grid lines wrong. The height is between 70 cm and 75 cm. d) 20 cm
2	a) 7,000 b) 8,500 c) No. multiple possible answers, e.g.: It is only partly into a square There isn't a measurement for that year. d) 1980s e) Answers will depend on how students continued the curve.
3	a) 50 mm b) February and April c) October d) 35 mm e) 3 f) 40 mm
4	things that you know: multiple possible answers, e.g.: Less energy is used in the middle of the year. The least energy is used in August. The most energy is used in December. things that you can find out: multiple possible answers, e.g.: The difference in the amount of energy used in different months. The total amount of energy used. The months with the greatest change.