# Maths Year 4

WEEK COMMENCING

06.07.20

# Overview for the Week:

| Please ONLY complete the work on the day's specified below! | | | | | |
|---|---|---|---|---|---|
| | Monday | Tuesday | Wednesday | Thursday | Friday |
| Group A English | Live Lesson- comprehension | Modal verbs | Book review | Story writing | Catch up day for this week's work. Don't forget Bug club! |
| Group A Maths | Interpreting charts | Comparison, sum and difference | Live lesson- introducing line graphs | Line graphs | Catch up for this week's work. |
| Group B | Catch up day for last weeks work. Don't forget Bug club! | Live Lesson- comprehension | Modal verbs | Book review | Story writing |
| Group B Maths | Catch up for last week's work. | Interpreting charts | Comparison, sum and difference | Live lesson- introducing line graphs | Line graphs |

DAY
1

Group A – Monday
Group B - Tuesday

# Day 1- Interpreting Charts

Task 1- recap:
Please start by completing pages 2 and 3 of your **maths activity pack.**

Task 2-recap:
Now complete pages 6 and 7 of the **times tables activity book**.

Task 3-teach:
Watch the video for the link below to learn about interpreting charts.
https://vimeo.com/432265669

Task 4 and 5- practice and apply:
Complete the work sheets on the following slides and try to complete the challenges ☺

# Interpret charts

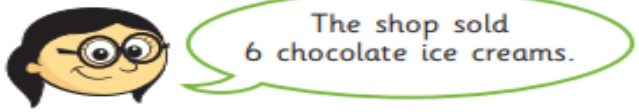
**1** The pictogram shows the number of ice creams sold in a shop.

| Ice cream flavour | Number of ice creams sold |
|---|---|
| vanilla | 4 |
| chocolate | 6 |
| strawberry | 1 |
| mint choc | |

**Key** = 2 ice creams

**a)** How many vanilla ice creams were sold?

**b)**



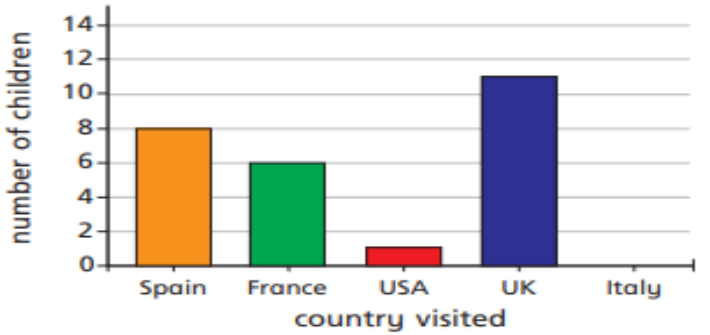

What mistake has Annie made?

**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

© White Rose Maths 2020

**3**

Chart A

Chart B

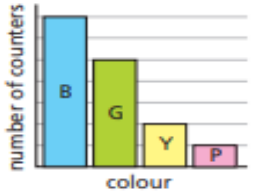
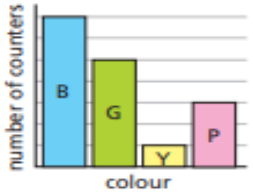



Chart C



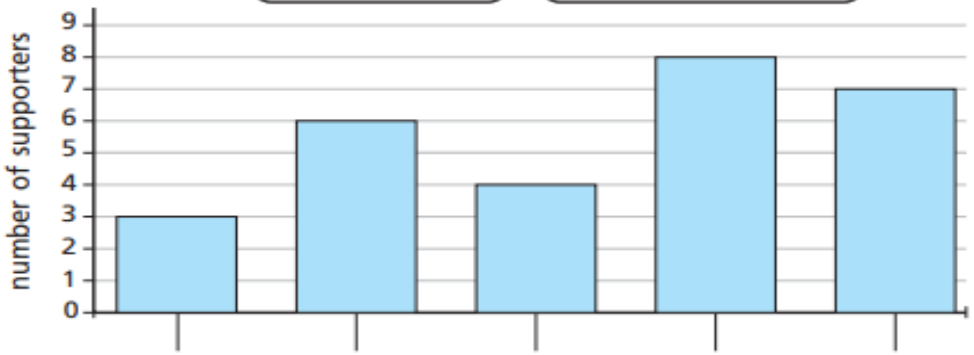

Which chart best represents the picture? _____

Explain why in your distance learning book.

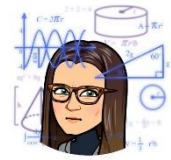
**4** Use the clues to label the bar chart.

- 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.

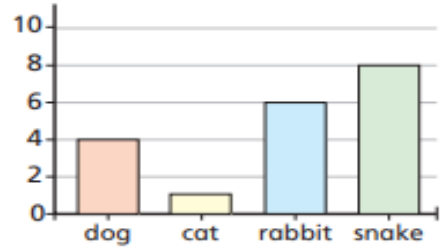
Bradford City | Huddersfield Town | Halifax Town | Leeds United | Manchester United



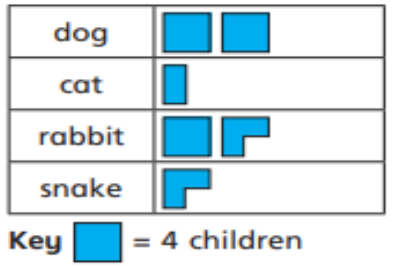

**5** Four classes of children were asked what their favourite animals are. Match the tables to the charts.



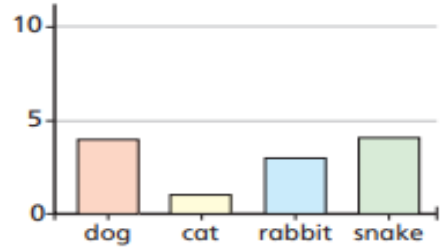
| Class A | |
|---|---|
| dog | 8 |
| cat | 2 |
| rabbit | 7 |
| snake | 12 |



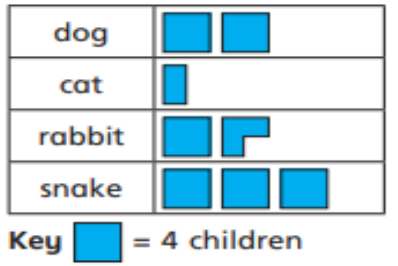

| Class B | |
|---|---|
| dog | 4 |
| cat | 1 |
| rabbit | 3 |
| snake | 4 |




| Class C | |
|---|---|
| dog | 4 |
| cat | 1 |
| rabbit | 6 |
| snake | 8 |




| Class D | |
|---|---|
| dog | 8 |
| cat | 2 |
| rabbit | 7 |
| snake | 3 |



# Challenge…..

A toy shop are keeping track of how many toys they sell each month.

The staff are thinking how to collect the information.

Ali: I think a tally chart beside the till would be the best way.

Lea: I want to use a bar chart, with a different colour for each toy.

Who do you agree with and why?

Mr Harrison says this pictogram is not easy to interpret.

*Favourite Sweets*

| | |
|---|---|
| Mint | |
| Toffee | |
| Chocolate Orange | |

Find 1 way you could improve the pictogram.

True or false?

**If your chart has a title, then you don't need to label the axes.**

Explain your answer.

Please write all explanations in your distance learning books.
REMEMBER to write as much as you can to explain your reasonings and findings.

# DAY 2

# Day 2 – Comparison, sum and difference

Task 1- recap:
Please start by completing pages 18 & 19 of your **maths activity pack.**

Task 2-recap:
Now complete pages 8 & 9 of the **times tables activity book**.

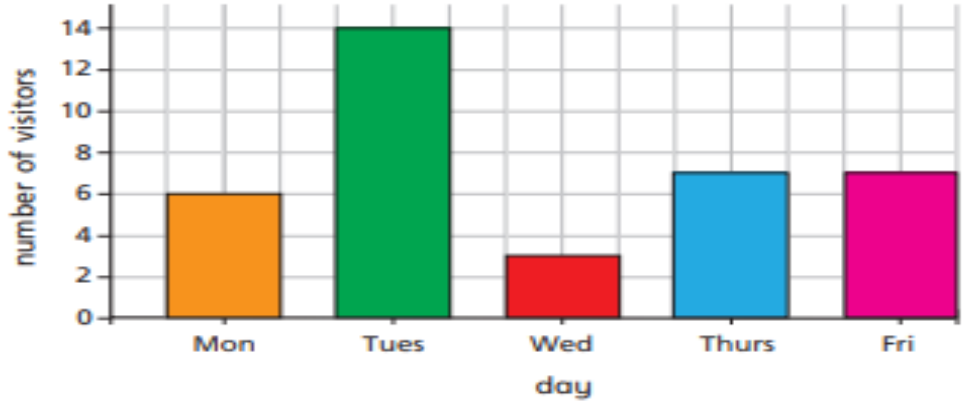
Task 3-teach:
Watch the video for the link below to learn about interpreting charts.
https://vimeo.com/432265829

Task 4 and 5- practice and apply:
Complete the work sheets on the following slides and try to complete the challenges ☺

Group A – Tuesday
Group B - Wednesday

# 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.

I can work out how many points each team scored and then subtract one from the other.

Is there another way Teddy could work out the answer?

© White Rose Maths 2020

CVPS

Group A – Tuesday
Group B - Wednesday

**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?

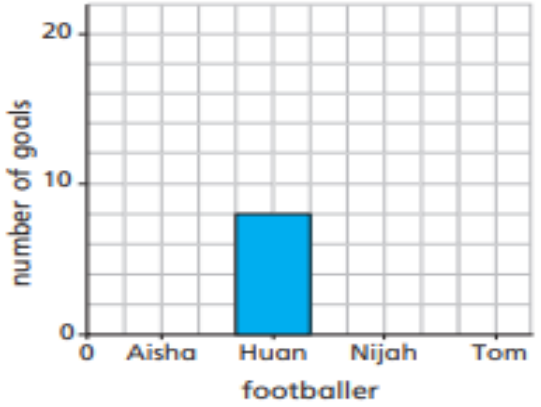
More women than men watched one of the films. _____

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.



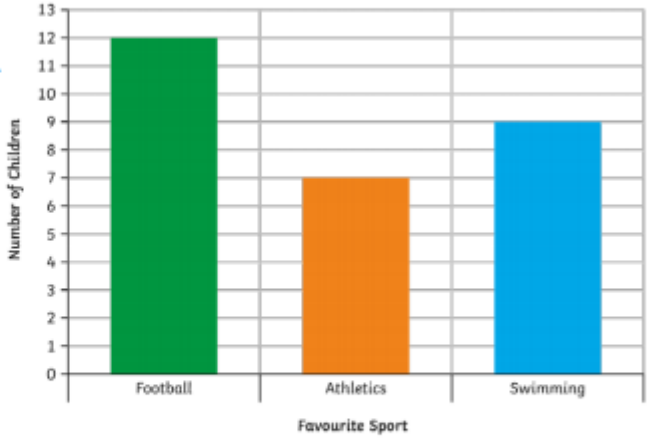

© White Rose Maths 2020

# Challenge…..

**Statistics**

a) How many children preferred athletics?

b) What is the difference in popularity between swimming and athletics?




c) How many children said football was their favourite sport?

d) 30 children were meant to vote. How many didn't vote?

**Statistics**

Use this data to create your own bar chart. Remember to label both axes and to give your bar chart a title.

| How we travel to school in Class 8 | Number of votes |
|---|---|
| walk | 8 |
| school bus | 6 |
| car | 10 |
| bike | 7 |

# DAY 3

# Do not complete the work on the following slides as we will be doing these in our live lesson. Please print any necessary slides in advance!

Group A – Live Lesson!
Group B – Live Lesson!

Group A – Live Lesson!
Group B – Live Lesson!

# Day 3- Live Lesson ☺

What have you been doing in maths this week?
What is rounding?

# Day 3- Introducing line graphs

Group A – Live Lesson!
Group B – Live Lesson!

Lets complete pages 34 & 35 together starting with question 3 & 4.

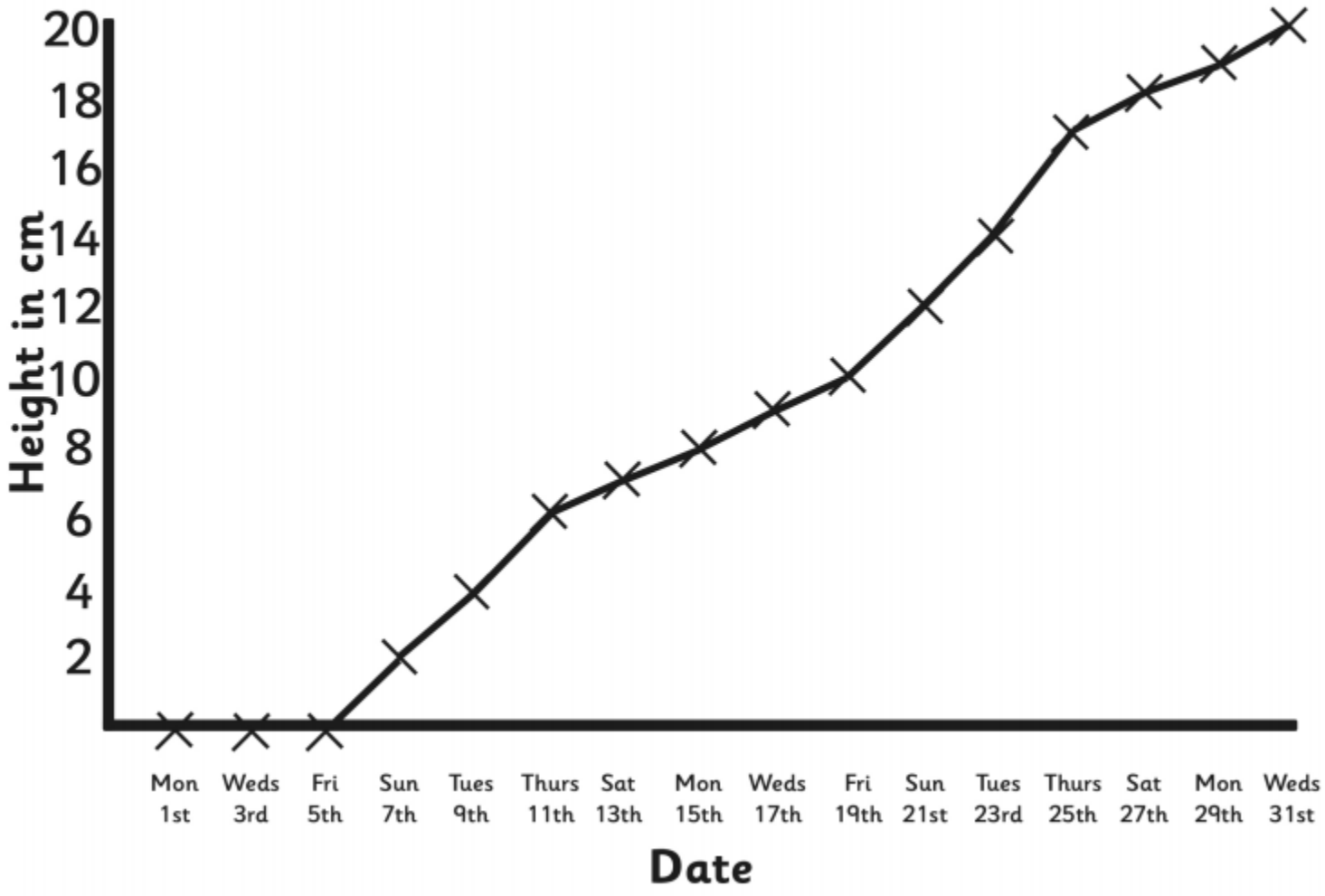
Then let's discuss question 1 & 2 ☺

We will then complete the work sheets on the following slides and I will introduce the challenges to you.

Please watch this video if you need further information on line graphs.

https://vimeo.com/432265995

Here is a line graph showing a sunflower's growth. Its height was measured every 2 days.




Questions

1. How many days did the plant take to grow to 18cm?

_____

2. What is the height difference between Friday 19th and Thurs 25th? _____

3. Why is there no measurement in the first week?

_____

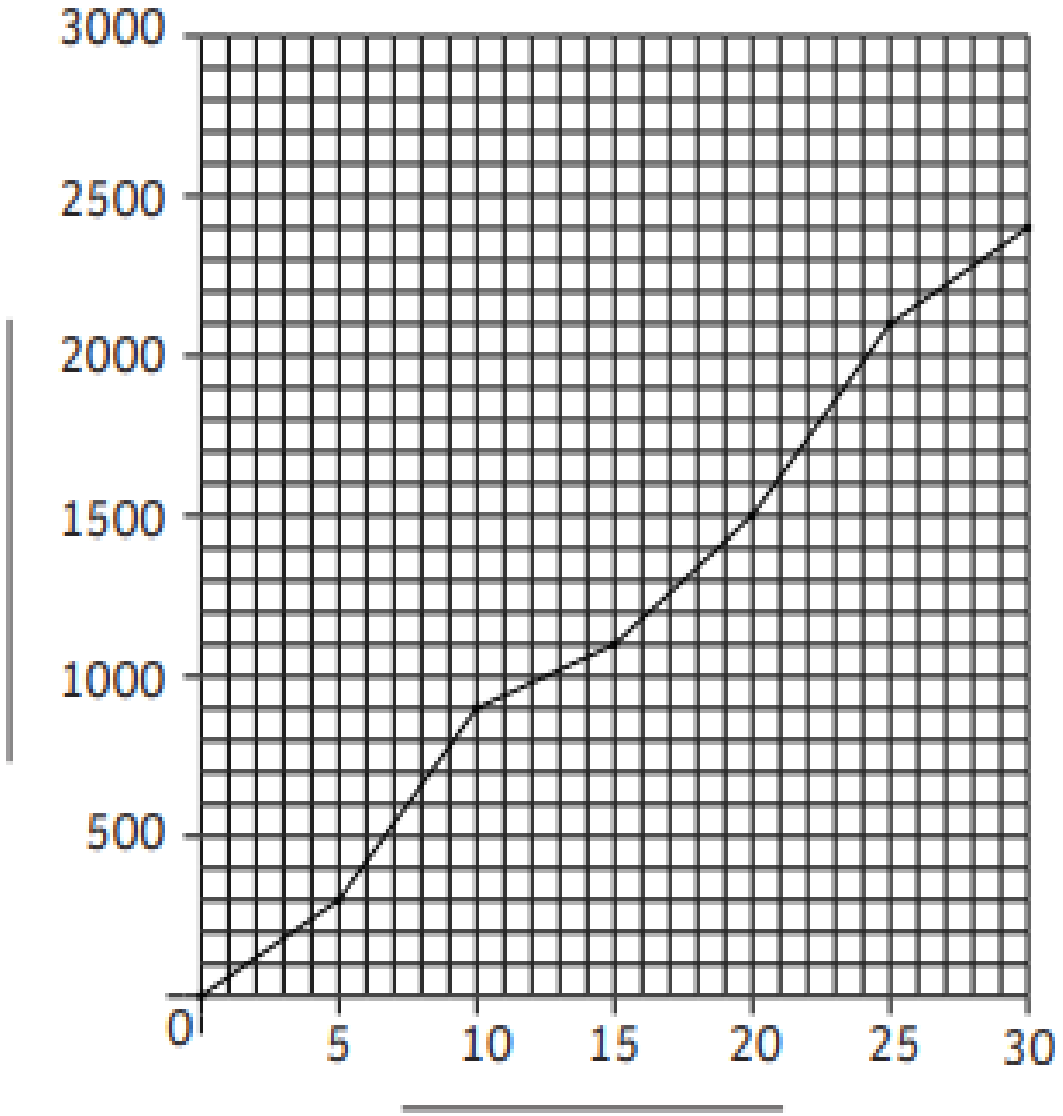
4. What is the height of the plant on these days:

a) Thurs 11th _____

b) Friday 19th _____

c) Monday 29th _____

A Line Graph to Show _____



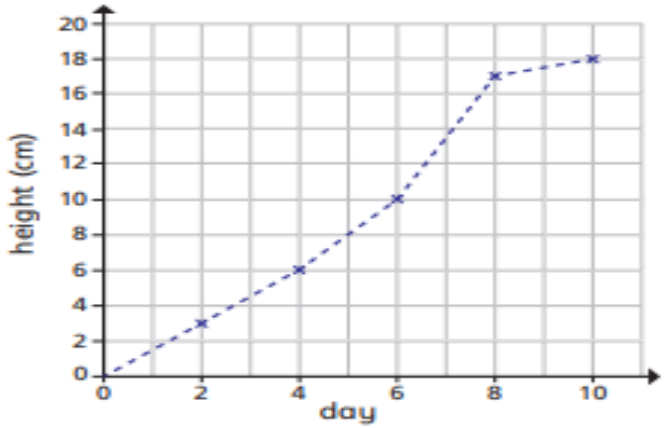
1) This line graph shows how far a class walked over half an hour, in metres. Add a title and label the axes.

2) Use the graph to complete the table.

| Time in Minutes | Distance in Metres |
|---|---|
| 5 | |
| 10 | |
| | |
| 20 | |
| | |
| 30 | |

# 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.

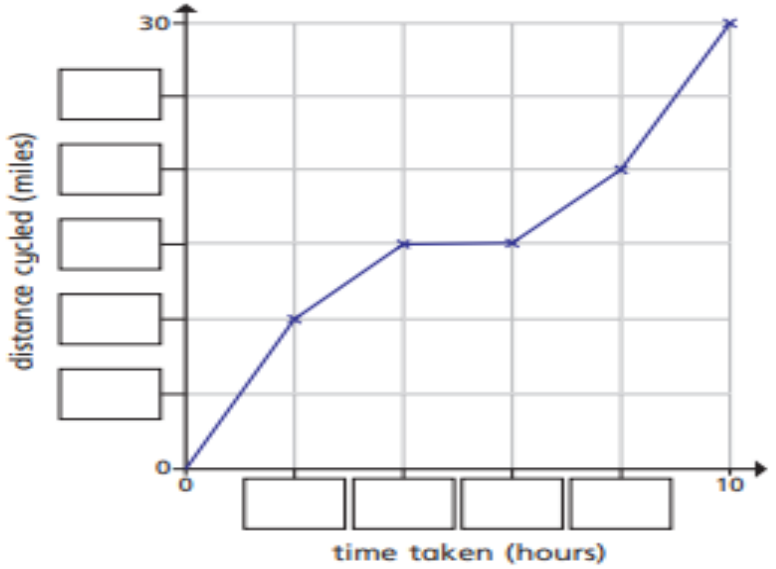
day ☐

**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

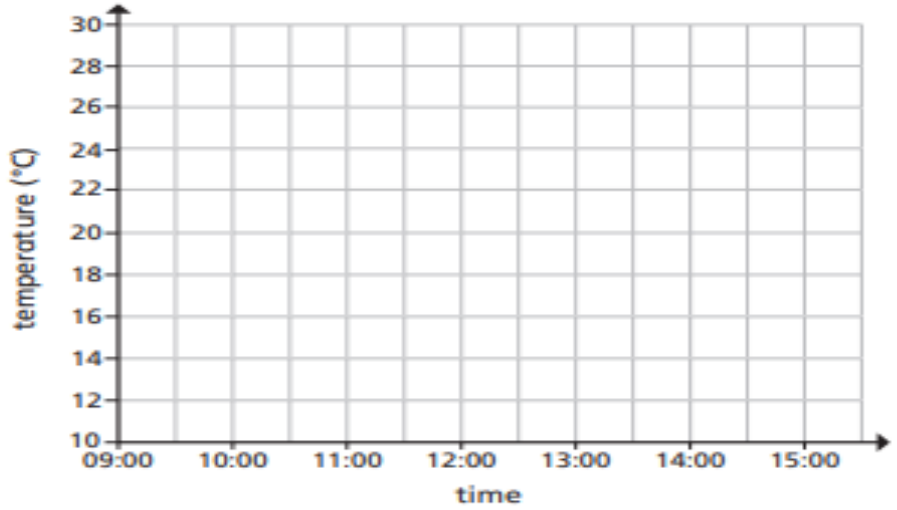
What might have happened during this time?

© White Rose Maths 2020

**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 _____

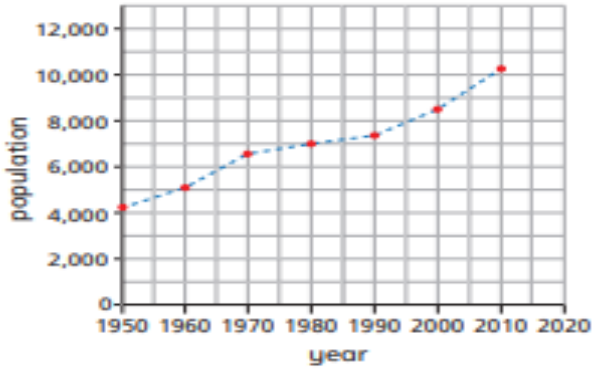
**b)** On Tuesday, the following temperatures were recorded.

| 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

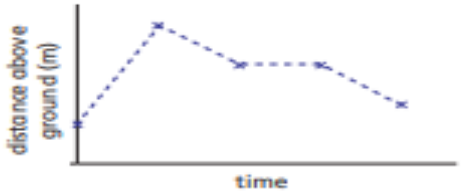
**b)** Estimate the highest recorded population.

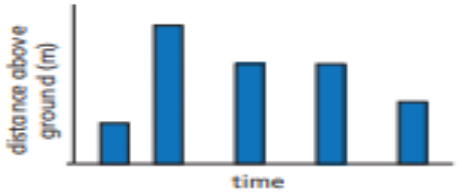
**c)** In what year did the population first reach 7,000?

**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? _____

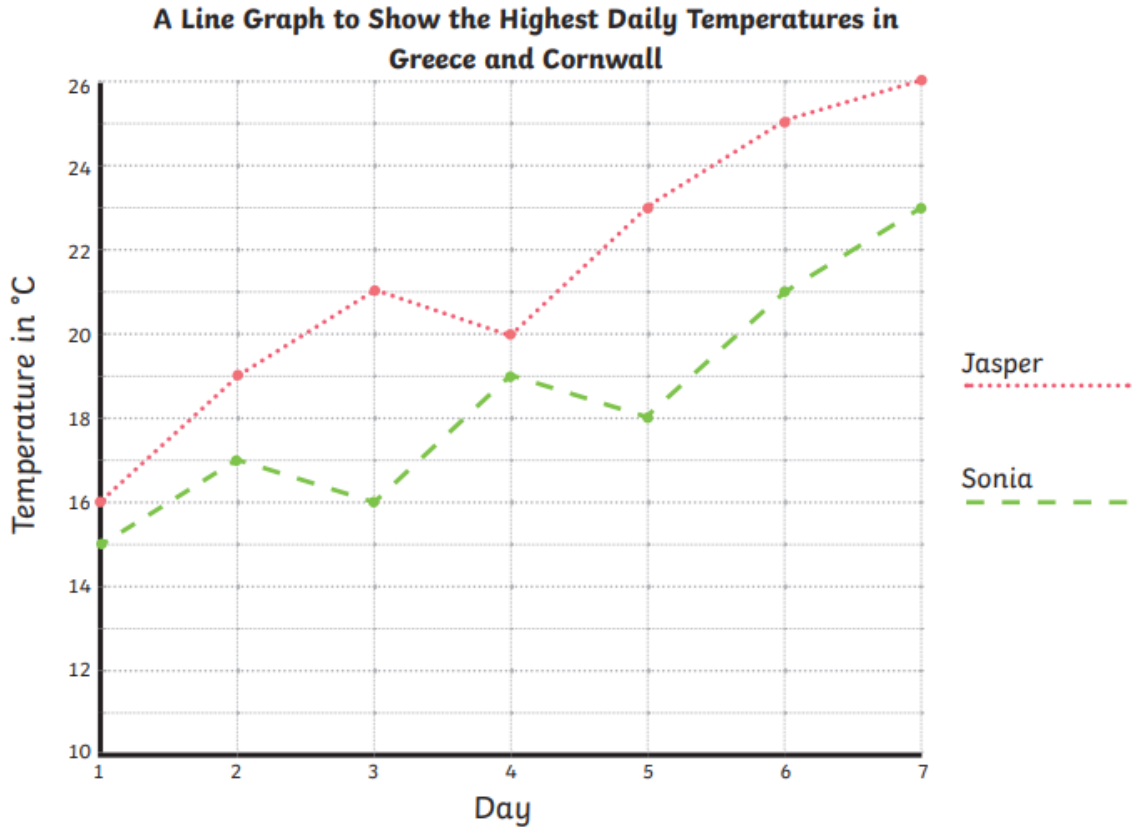
Explain your choice to a partner.

© White Rose Maths 2020

# Challenge.....

Jasper went on his summer holiday to Greece. Sonia went on her summer holiday to Cornwall. Here is a line graph showing the highest daily temperature on each day of their summer holidays.

Use the graph to answer the questions.




| | |
|---|---|
| 1. What was the temperature on day 4 of Jasper's holiday? | 2. What was the temperature on day 1 on Sonia's holiday? |
| 3. What was the difference in temperature between Greece and Cornwall on day 3? | 4. How much warmer was it in Greece than Cornwall on day 7? |
| 5. On which day was the temperature of Sonia's holiday 21°C? | 6. On which day did the temperature in Greece decrease? |

Workings out.....

4
DAY

Group A – Thursday
Group B - Friday

# Day 4- Line graphs

Can you use?
Task 1- recap:
Please start by completing pages 10 & 11 of your times tables activity book.

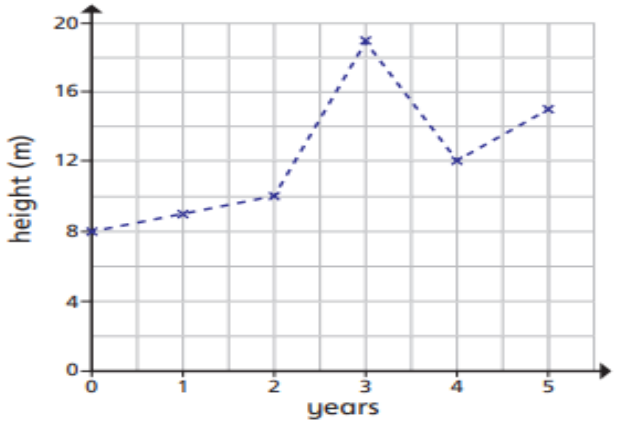
Task 2-teach:
Watch the video for the link below to learn about interpreting charts.
https://vimeo.com/432266309

Task 3 and 4- practice and apply:
Complete the work sheets on the following slides and try to complete the challenges

# Line graphs

Group A – Thursday
Group B - Friday

**1** The line graph shows the growth of a tree.

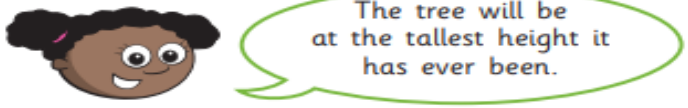



**a)** What is the difference in height between the start and end of recording? ☐ m

**b)** How much did the tree grow between the 2nd and 3rd year? ☐ m

**c)** What happened in year 3?
What might have caused this?

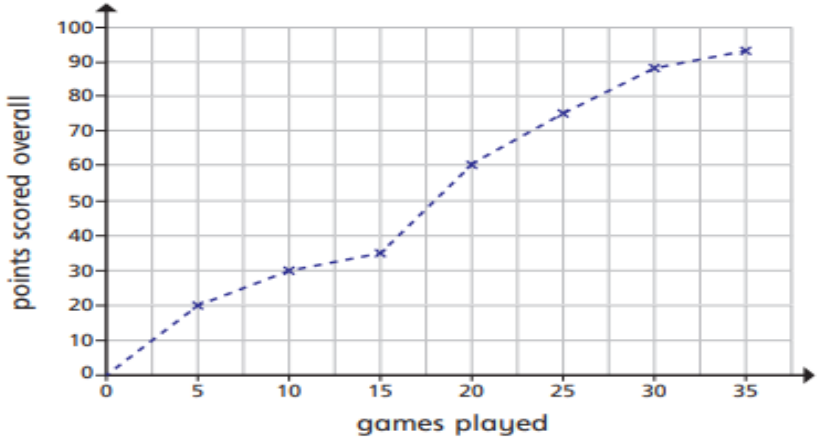
**d)** By the 6th year the tree grows to three times the height it was in the 1st year.




Do you agree with Whitney? _____

Explain your answer.

**2** The line graph shows the number of points scored over 35 games.




**a)** Use the line graph to complete the table.

| Games | 0 | 5 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Points | 0 | | | | | | 88 | 93 |

**b)** How many points were scored between games 10 and 25? ☐

**c)** Between which games did the points exactly double?

between game ☐ and game ☐

**d)** Between which games were the least number of points scored?

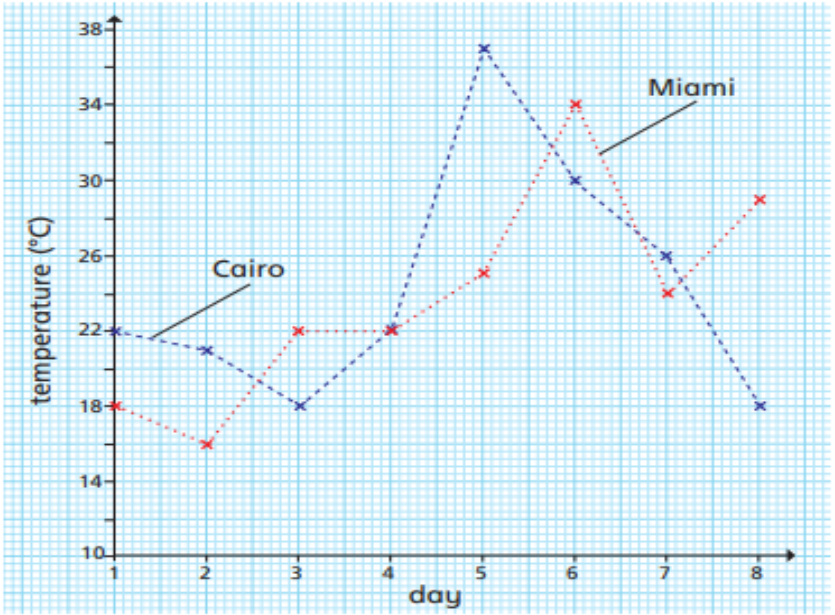
game ☐ and game ☐

**e)** Estimate how many games it took to score 50 points. ☐

© White Rose Maths 2020

Group A – Thursday
Group B - Friday

**3** The line graph shows the temperatures in Miami and Cairo over 8 days.




**a)** On what day was the temperature the same in both cities?

day ☐

**b)** What is the difference in temperature between the hottest days in both cities?

☐ °C

**c)** What is the difference between the hottest recorded temperature and the lowest recorded temperature?

☐ °C

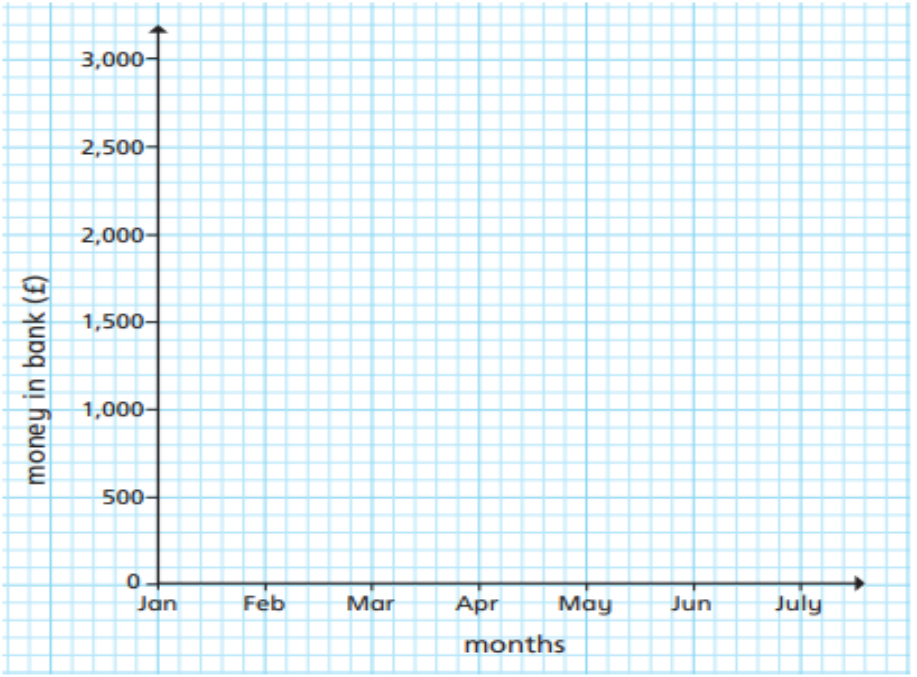
**d)** On which days was it warmer in Cairo than Miami?

_____

**e)** On what day was there the greatest difference in temperature between the two cities?

day ☐

**4** Use the clues to complete the line graph.




- In February there was £2,800 in the bank, which was the largest overall amount.
- May had the lowest amount.
- In March there was half the amount of February.
- In Jan there was £200 more than March.
- The total of March and April combined was £2,600
- The lowest amount was £2,400 less than the highest amount.
- In July and April there was the same amount of money.
- June = Feb – Mar – May

Compare answers with a partner.

© White Rose Maths 2020

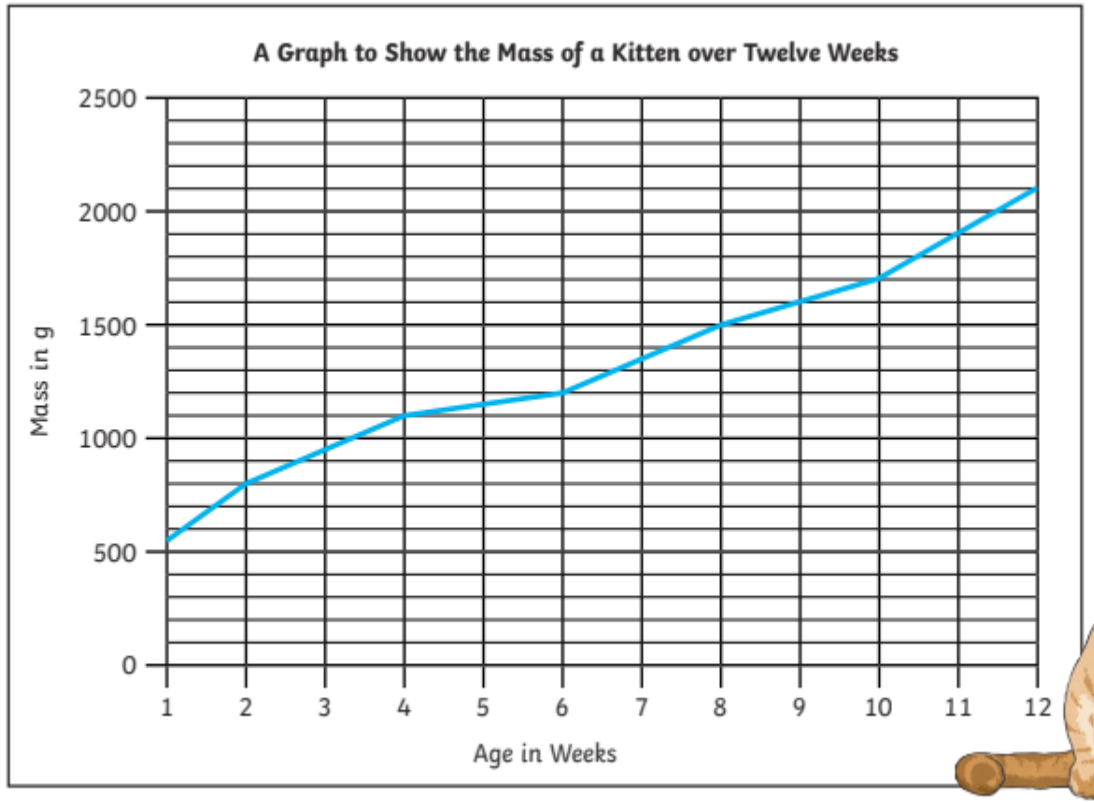
# Challenge.....

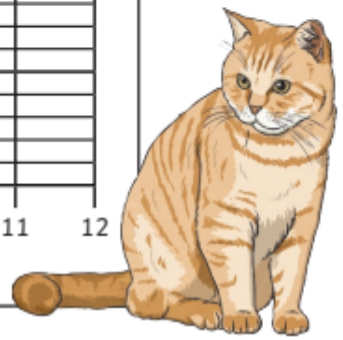
1) **a)** What was the mass of the kitten at 4 weeks old? _____

**b)** How much did the mass of the kitten increase between weeks 6 and 8? _____

**c)** In which week did the mass of the kitten increase the most? _____

**d)** How many weeks did it take for the kitten to double its mass from week one? _____



2) Add kitten 2's mass to the line graph using the following data.

| Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mass of kitten 2 (g) | 400 | 750 | 1000 | 1200 | 1300 | 1350 | 1450 | 1500 | 1600 | 1700 | 1800 | 1850 |

Workings out.....

BYE!