https://whiterosemaths.com/homelearning/

White Rose Hub online video & BBC Bitesize Maths lessons

We are now working on week 10 so that the children can access the BBC Bitesize videos alongside the White Rose Hub resources that we are already using. Make sure that your child watches each video and complete the activity sheet in this pack. (The sheets are no longer free on the website as school now need to subscribe, which we have).

On Friday there is an arithmetic test for you to complete – it would be great if you could email your scores to your teacher.

Challenge:

Each day, there are some optional challenge questions linked to each lesson.

Support:

Ask an adult to watch the video with you and help you to complete the questions you can do. You might also find it helpful to watch the BBC Bitesize lesson as well. If this is still too tricky, then don't worry - complete the 'I need extra help' maths learning pack instead.

Don't forget to play TTTRS and NUMBOTS this week as well.



BBC Bitesize daily maths lessons https://www.bbc.co.uk/bitesize/dailylessons



https://play.numbots.com/#/account/school-login/2875



https://play.ttrockstars.com/auth/school/student/2875



https://www.purplemash.com/sch/epsom-kt19

29.06.20 Lesson 1



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Interpret charts

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

Ice cream flavour	Number of ice creams sold
vanilla	\bigcirc \bigcirc \bigcirc
chocolate	\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc
strawberry	♦ ﴿
mint choc	

Key = 2 ice creams

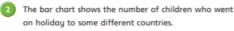
a) How many vanilla ice creams were sold?

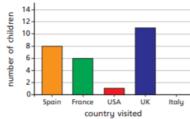
b)



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.





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

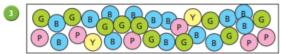
Country	Number of children visiting
Spain	
France	
USA	
UK	
Italy	

 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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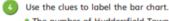




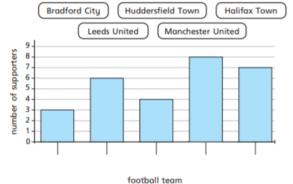


Which chart best represents the picture?

Talk to a partner about the reasons for your choice.



- 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.



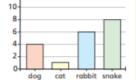
Four classes of children were asked what their favourite animals are. Match the tables to the charts.

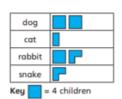
Class A	
dog 8	
cat	2
rabbit	7
snake	12

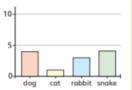
Class B	
dog	4
cat	1
rabbit	3
snaka	4

Class C	
dog	4
cat	1
rabbit	6
snake	8

Class D	
dog 8	
cat	2
rabbit	7
snake	3







4	
dog	
cat	
rabbit	
snake	
Key = 4 children	

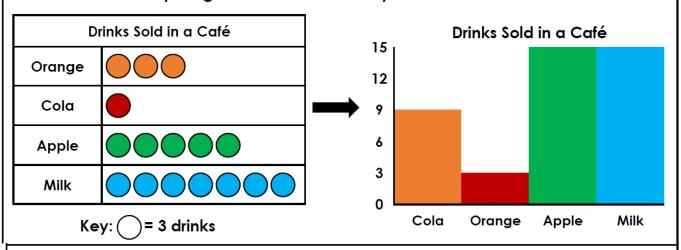
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Optional

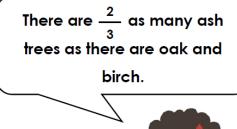
Linked with Lesson 1 - Additional Challenge

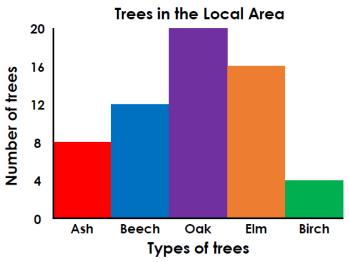


7. True or false? This pictogram has been correctly converted into a bar chart.



8. Ruby says,





Is she correct?

- 9. Jude has used the information in the table below to make a pictogram.
- A. Do you think a pictogram is the best way to present this information? Explain your answer.
- B. Draw your own chart to present the information in the table.

Size of Audience at Cinema	
1pm	***
3pm	*********
5pm	***************************************
7pm	***************************************

Size of Audience at Cinema	
1pm	
3pm	
5pm	••••••••••••••••••••••••••••••••••••••
7pm	



Key: () = 10 people

Answers - 29.06.20 Lesson 1

Interpret charts



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

Ice cream flavour	Number of ice creams sold
vanilla	\bigcirc \bigcirc \bigcirc
chocolate	\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc
strawberry	♦ (
mint choc	

Key ho = 2 ice creams

a) How many vanilla ice creams were sold?

8

b)



What mistake has Annie made?

She has counted the number of pictures of ice

creams on the pretogram.

c) How many chocolate ice creams were sold?

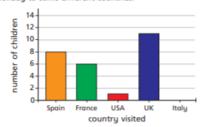
12

d) How many strawberry ice creams were sold?

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



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.

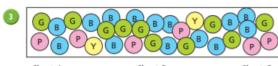
Country	Number of of children visiting
Spain	8
France	6
USA	
UK	П
Italy	0

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

Country	Number of of children visiting			
Spain	0 0			
France	O O			
USA				
UK	000			
Italy				

Key = 4 children

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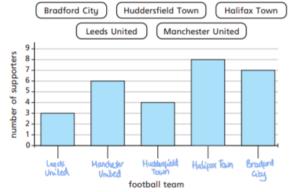




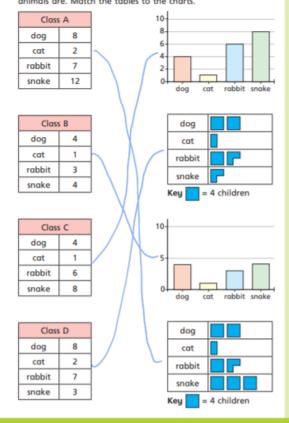
Which chart best represents the picture?

Talk to a partner about the reasons for your choice.

- Use the clues to label the bar chart.
 - The number of Huddersfield Town supporters is half the number of Halifax Town supporters.
 - Most people support Halifax Town.
 - More people support Manchester United than Leeds United.
 - There is 1 less supporter of Bradford City than Halifax Town.



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





Answers - 29.06.20 Lesson 1 Additional Challenge



- 7. False, the scale should go up to 21 and the orange/cola labels have been mixed up.
- 8. No, there are one third as many ash trees as oak and birch.
- **9.** A. Various possible answers, for example; No, it is not easy to show numbers that are not multiples of the scale when using a pictogram.
- B. An accurate bar chart with a scale of 5:1.

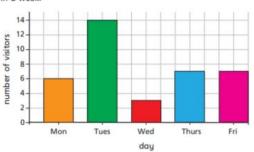


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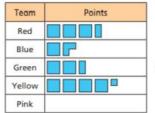
Comparison, sum and difference

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



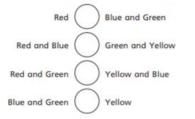
- a) How many more visitors went to the museum on Tuesday than on Wednesday?
- b) What is the difference between the number of visitors on Monday and the number of visitors on Friday?
- c) What was the total number of visitors for the whole week?
- d) If there were 3 times as many visitors on Saturday as there were on Thursday, how many people visited on Saturday?

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



Key = 4 points

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



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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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

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

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?



Film	Women	Men	Total	
А	364	618		
В	411		895	
С	609	255		
Total		1,357		

- a) Complete the table.
- b) Are these statements true or false?

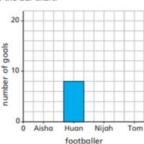
More women than men watched one of the films.

Film B was the most popular.

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.





Optional

Linked with Lesson 2 - Additional Challenge



7. Calculate the totals for each set of data.

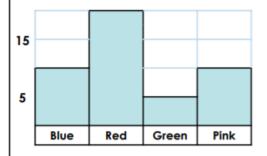
Members of after-school clubs

Club	Boys	Girls	Total Members				
Rugby	25	15					
Yoga	20	25					
Art	25	35					
Chess	15	15					

Runner	Time to Complete Race in Minutes	Total
Adam	***	
Holly	#######	
Peter	####	
Daisy	## ## III	

8. Calculate the difference for each colour.

Year 5's Favourite Colours



Year 6's Favourite Colours



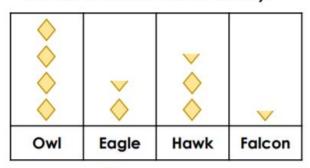


Pink

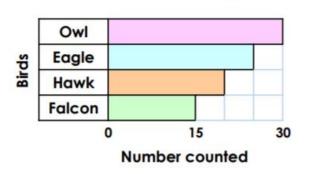
Write 3 questions which compare the data.

9. What is the same? What is different?

A Birds counted in the sanctuary.



B Birds counted in the wildlife park.





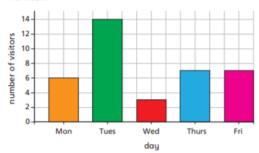
Answers - 30.06.20 Lesson 2



Comparison, sum and difference



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



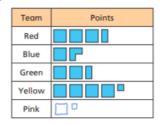
- a) How many more visitors went to the museum on Tuesday than on Wednesday?
- b) What is the difference between the number of visitors on Monday and the number of visitors on Friday?
- c) What was the total number of visitors for the whole week?

37

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

21

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



Key = 4 points

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



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

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.

54 hours

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.

54 hours

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

Film	Women	Men	Total	
А	364	618	982	
В	411	484	895	
С	609	255	864	
Total	1.384	1,357	2,74	

- a) Complete the table.
- b) Are these statements true or false?

More women than men watched one of the films.

true

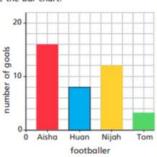
Film B was the most popular.

colse

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.



Which method is the most efficient? Will that always be the case?

Answers - 30.06.20 Lesson 2 Additional Challenge



- 7. 40, 45, 60, 30; 20, 19, 18, 14
- **8.** 5, 10, 0, 5; Various possible answers, for example: Which colour received the same number of votes in each year group? Was blue more popular in Year 5 or 6? Which colour received the least votes?
- 9. Various possible answers, for example: Same falcons were the least common in both data sets, owls were the most common in both data sets. Different there were more hawks than eagles in the sanctuary but more eagles than hawks in the wildlife park, there were hundreds of birds in the sanctuary and much fewer in the wildlife park.

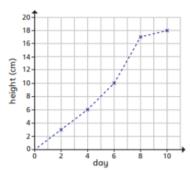


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Introducing line graphs

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

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

cm. ____

e) Between which two consecutive days did the cress grow

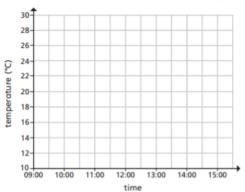
the most?

day and day

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

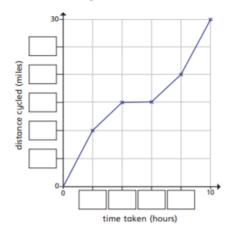
Add the new information to your line graph using a different colour and complete the key.

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



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

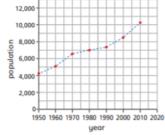
e) How far did the cyclist travel between 4 and 6 hours?

miles

What might have happened during this time?

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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

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

ground (m)

distance above ground (m)

Which representation is more appropriate? Explain your choice to a partner.

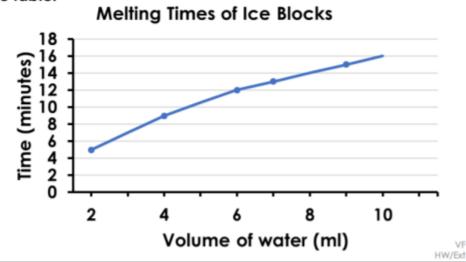
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Linked with Lesson 3 - Additional Challenge



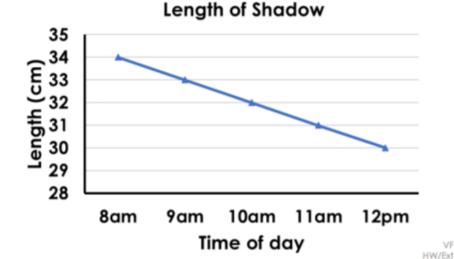
7. Use the information in the line graph about how long it takes a block of ice to melt to fill in all the blanks in the table.

Water (ml)	Time (minutes)
2	
4	
6	
7	
9	





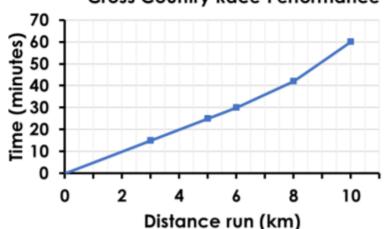
- 8. A class are measuring the length of the shadow of a 30cm ruler during a morning.
- A. How long was the shadow at 8.30am?
- B. What is the difference between the shortest and longest shadow?
- C. At what recorded time was the shadow longest?





9. True or false? The information in this table has been correctly converted into a line graph. The data shows how a cross country runner performed during a race. Explain your answer.
Cross Country Race Performance

Distance (km)	Time (minutes)
3	10
5	20
6	30
8	40
10	60



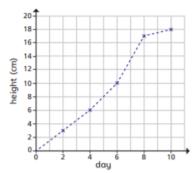


Answers - 01.07.20 Lesson 3



Introducing line graphs





- a) How tall was the cress on Day 2?
- 3 cm
- b) On what day did the cress reach 10 cm?
- day 6
- c) Estimate the height of the cress on Day 5
- g cm
- d) Estimate when the cress will reach a height of 14 cm.



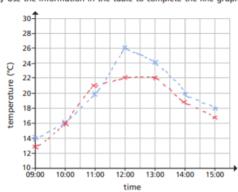
e) Between which two consecutive days did the cress grow the most?



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.

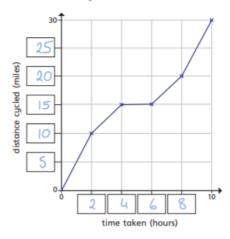
Time	09:00	10:00	11:00	12:00	13:00	14:00	15:00
Temperature (°C)	13	16	21	22	22	19	17

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?

11:00

- 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?

2 hours

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

\5 miles

d) How far did the cyclist travel in total?

30 miles

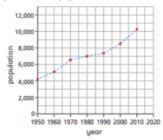
e) How far did the cyclist travel between 4 and 6 hours?

miles

What might have happened during this time?

© White Rose Maths 2020

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.

10,200

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

1980

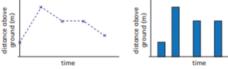
d) Estimate the population in 1970

6,500

e) Estimate the population in 2006

9,500

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.

True Both

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Answers - 01.07.20 Lesson 3 Additional Challenge



7.2-5,4-9,6-12,7-13,9-15

^{8.} A. 33.5cm, B. 4cm, C. 8am

^{9.} False, it took the runner 10 minutes to run 3km and 20 minutes to run 5km.

02.07.20 Lesson 4



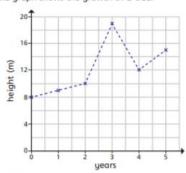
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Line graphs



The line graph shows the growth of a tree.



- a) What is the difference in height between the start and end of recording?
- b) How much did the tree grow between the 2nd and 3rd year?
- 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.



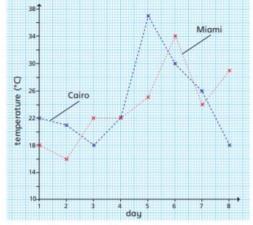
The tree will be at the tallest height it has ever been.

Do you agree with Whitney? _____ Explain your answer.



m

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?

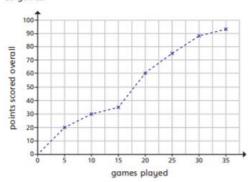
00

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

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

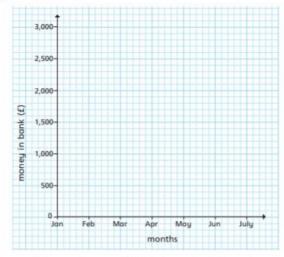
d) Between which games were the least number of points scored?

game and game

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

M. Marine Revent Martin 2003

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.

Linked with Lesson 4 – Additional Challenge



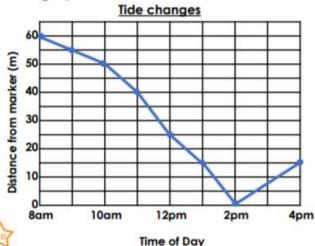
7. Use the line graph below to answer the following questions about the weight of an elephant calf.



- A. How many kilograms did the elephant calf weigh in week 7?
- B. When did the elephant calf weigh 130kg?
- C. How many kilograms did the calf gain between week 1 and week 6?
- D. What was the difference between the weight of the calf at week 2 and week 5?

VF HW/Ext

Beth measured the changes of a tide. Complete the questions and answers using Beth's graph.



A. How much further did the tide come in during 12pm and 2pm than the first 2 hours?



B. Was the tide quicker at changing between 55 to 40 metres or 25 to 15 metres?



C.

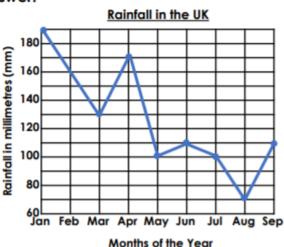


HW/Ext

9. Four children are investigating rainfall over time. Which stories match the line graph below? Explain your answer.

Erol took the measurement in March, by June it was 40mm less.

Maisie took the measurement in April, by August it was 100mm less.



Tahida took the measurement in July, in June it was 20mm more.

Patrick took the measurement in May, by August it was 30mm less.



RPS HW/Ext

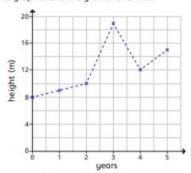
Answers - 02.07.20 Lesson 4



Line graphs



The line graph shows the growth of a tree.



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



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



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

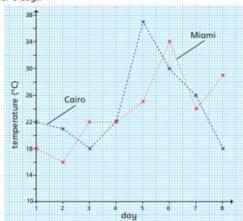


d) By the 6th year the tree grows to three times the height it was in the 1st year.



The tree will be at the tallest height it has ever been.





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



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



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



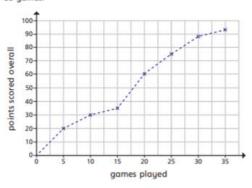
d) On which days was it warmer in Cairo than Miami?



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

day 5

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



a) Use the line graph to complete the table.

Games	0	5	10	15	20	25	30	35
Points	0	२०	30	35	60	75	88	93

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

45

c) Between which games did the points exactly double?



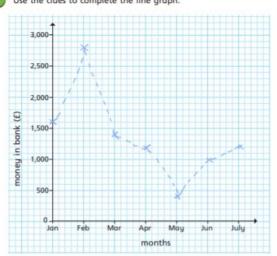
d) Between which games were the least number of points scored?

game 30 and game 35

((or 10 and 15)

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

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.

Answers - 02.07.20 Lesson 4 Additional Challenge



- 7. A. 150kg; B. Week 3; C. 30kg; D. 25kg
- 8. A. 15 metres; B. 25 to 15 metres; C. Various answers including questions such as How long did it take for the tide to change from 50 to 15 metres from the marker?
- 9. Maisie and Patrick are both correct. Maisie is correct because in April the rainfall was 170mm and in August it was 70mm. The rainfall had decreased by 100mm. Patrick is also correct because in May the rainfall was 100mm and in August is was 70mm. The rainfall had decreased by 30mm.

03.07.20 Lesson 5 - Arithmetic Test



1	25 × 1 =	

2
$$\left| \frac{4}{5} - \frac{3}{5} \right| =$$

$$= \frac{1}{4} \text{ of } 32$$

10 =
$$\frac{1}{3}$$
 of 36

$$17 \left| \frac{4}{10} + \frac{9}{10} \right| = \boxed{ }$$

03.07.20 Lesson 5 – Arithmetic Test - answers



Question number	Question	Answer	Marks			
1	25 × 1 =	25	1			
2	$\frac{4}{5} - \frac{3}{5} = \square$	1 5	1			
3	74 + 55 =	129	1			
4	$ = \frac{1}{4} \text{ of } 32 $	8	1			
5	21 ÷ 7 =	3	1			
6	80 × 0 =	0	1			
7	7 × 12 =	84	1			
8	÷ 9 = 6	54	1			
9	5 × 7 × 4 =	140	1			
10	$ = \frac{1}{3} \text{ of } 36 $	12	1			
11	672 - 474 =	198	1			
12	480 ÷ 6 =	80	1			
13	45 + = 91	46	1			
14	352 × 2 =	704	1			
15	12 × 🔲 = 720	60	1			
16	23 × 5 × 4 =	460	1			
17	$\frac{4}{10} + \frac{9}{10} = $	$\frac{13}{10}$ or $1\frac{3}{10}$	1			
18	57 ÷ 3 =	19	1			
19	= 6 ÷ 10	0.6	1			
20	÷ 8 = 27	216	1			
21	73 ÷ 100 =	0.73	1			
22	527 × 6 =	3162	1			
23	5003 - 3586 =	1417	1			
24	98 ÷ = 7	14	1			
25	56 = = ÷ 10	560	1			
Total marks						