Wednesday 24ᵗʰ June

Hello Year 6,

How are you? We both hope that things are okay at home and that you are able to spend time completing your home-learning but also finding time to relax and have fun with your families.

Here are the activities for this week for you to follow and complete. In Maths we're consolidating our work on position and direction then moving on to explore line graphs. There's a number puzzle to finish the week off! You worked so hard in the last English unit that we decided to have a little break from writing and have put together lots of SPaG puzzles that we think you'll enjoy. There's PSHE, PE, Outdoor Learning and Art sprinkled in there too!!

If you have some spare time or want to do some extra learning, you could visit https://www.bbc.co.uk/bitesize or https://www.thenational.academy/online-classroom where there are lots of lessons and activities to choose from.

As always, try to read for at least 20 minutes a day and take Accelerated Reader quizzes from home by using this link Howley Grange Renaissance at home and logging on as usual using your username and password. To check that the book you are reading has a quiz, you can check it using on Accelerated Reader Bookfinder.
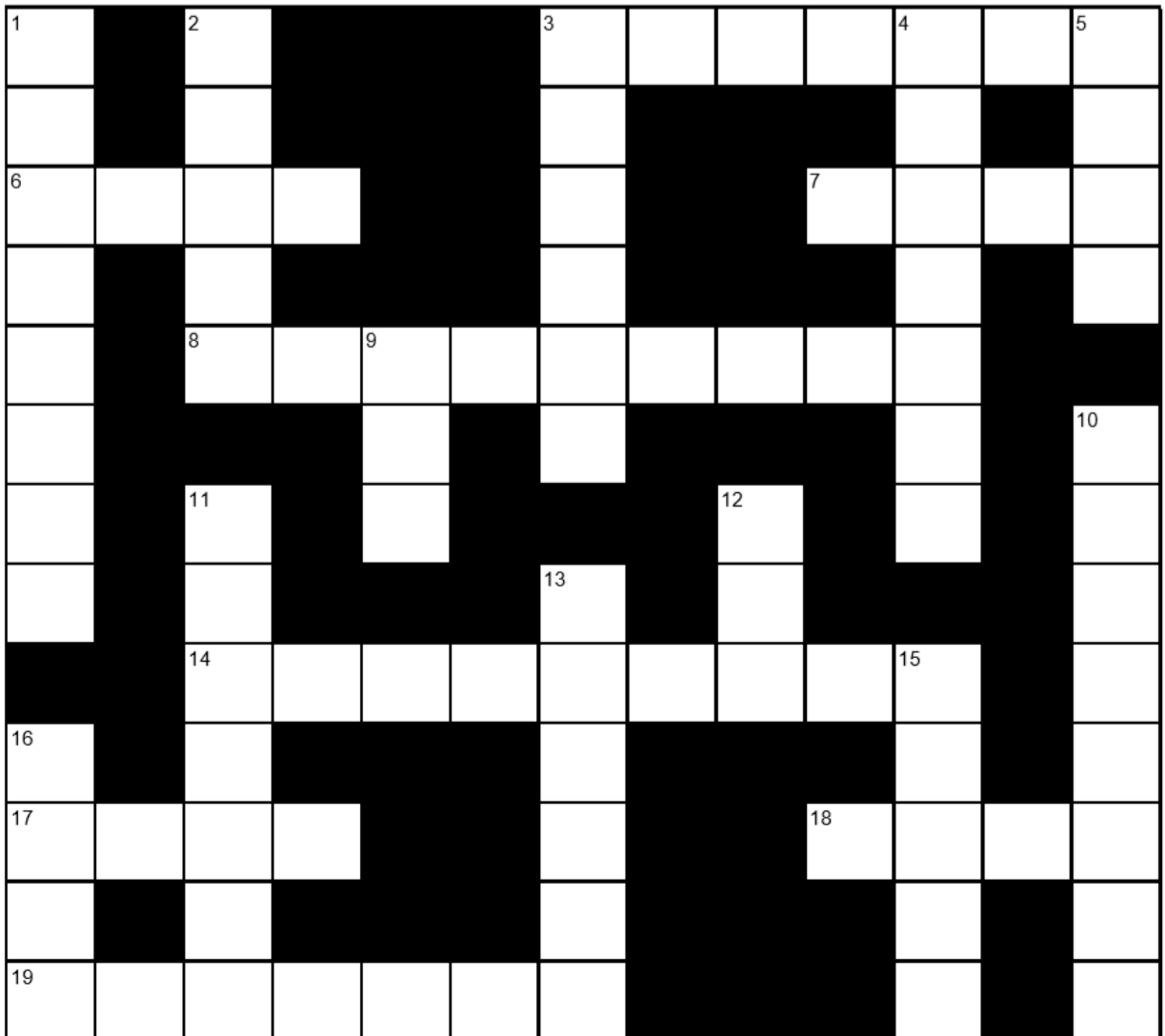
Take care and keep smiling,

We do miss you,

Mrs Graham and Mrs North

English Activity 3 – Year 5 and 6 spelling crossword puzzle

Many of these words are taken from the Year 5 and 6 spelling list.

CLUES ACROSS

3 Clumsy
6 Intend, have in mind
7 Land measure
8 Right or advantage given to person
14 Obstruction, hitch, snag
17 Prayer ending
18 Cleanse with water
19 Mean, standard, common

CLUES DOWN

1 Frequently seen, common
2 Wandering homeless person dressed shabbily
3 Frightened
4 Very old, from a bygone age
5 Food eaten
9 Frozen water
10 Joined, next to
11 Gain, attain a goal
12 Rubbish container
13 Skin discolouration due to an injury
15 Accurate, precise
16 Substance which comes from a volcano

Year 5 and 6 Statutory Spellings

accommodate	conscious	foreign	occupy	sincere
accompany	controversy	forty	occur	sincerely
according	convenience	frequently	opportunity	soldier
achieve	correspond	government	parliament	stomach
aggressive	criticise	guarantee	persuade	sufficient
amateur	curiosity	harass	physical	suggest
ancient	definite	hindrance	prejudice	symbol
apparent	desperate	identity	privilege	system
appreciate	determined	immediate	profession	temperature
attached	develop	immediately	programme	thorough
available	dictionary	individual	pronunciation	twelfth
average	disastrous	interfere	queue	variety
awkward	embarrass	interrupt	recognise	vegetable
bargain	environment	language	recommend	vehicle
bruise	equipment	leisure	relevant	yacht
category	equipped	lightning	restaurant	
cemetery	especially	marvellous	rhyme	
committee	exaggerate	mischievous	rhythm	
communicate	excellent	muscle	sacrifice	
community	existence	necessary	secretary	
competition	explanation	neighbour	shoulder	
conscience	familiar	nuisance	signature	

twinkl

visit twinkl.com

ANSWERS English Activity 3 – Year 5 and 6 spelling crossword puzzle

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13
1	[1] F	█	[2] T	█	█	█	[3] A	W	K	W	[4] A	R	[5] D
2	A	█	R	█	█	█	F	█	█	█	N	█	I
3	[6] M	E	A	N	█	█	R	█	█	[7] A	C	R	E
4	I	█	M	█	█	█	A	█	█	█	I	█	T
5	L	█	[8] P	R	[9] I	V	I	L	E	G	E	█	█
6	I	█	█	█	C	█	D	█	█	█	N	█	[10] A
7	A	█	[11] A	█	E	█	█	█	[12] B	█	T	█	T
8	R	█	C	█	█	█	[13] B	█	I	█	█	█	T
9	█	█	[14] H	I	N	D	R	A	N	C	[15] E	█	A
10	[16] L	█	I	█	█	█	U	█	█	█	X	█	C
11	[17] A	M	E	N	█	█	I	█	█	[18] W	A	S	H
12	V	█	V	█	█	█	S	█	█	█	C	█	E
13	[19] A	V	E	R	A	G	E	█	█	█	T	█	D

Across
- 3. AWKWARD
- 6. MEAN
- 7. ACRE
- 8. PRIVILEGE
- 14. HINDRANCE
- 17. AMEN
- 18. WASH
- 19. AVERAGE

Down
- 1. FAMILIAR
- 2. TRAMP
- 3. AFRAID
- 4. ANCIENT
- 5. DIET
- 9. ICE
- 10. ATTACHED
- 11. ACHIEVE
- 12. BIN
- 13. BRUISE
- 15. EXACT
- 16. LAVA

4

tes

Use this blank template to create your own crossword for someone at home to solve. Fill in the words and clues before colouring in the unused squares. Remember to keep a copy of your answers.
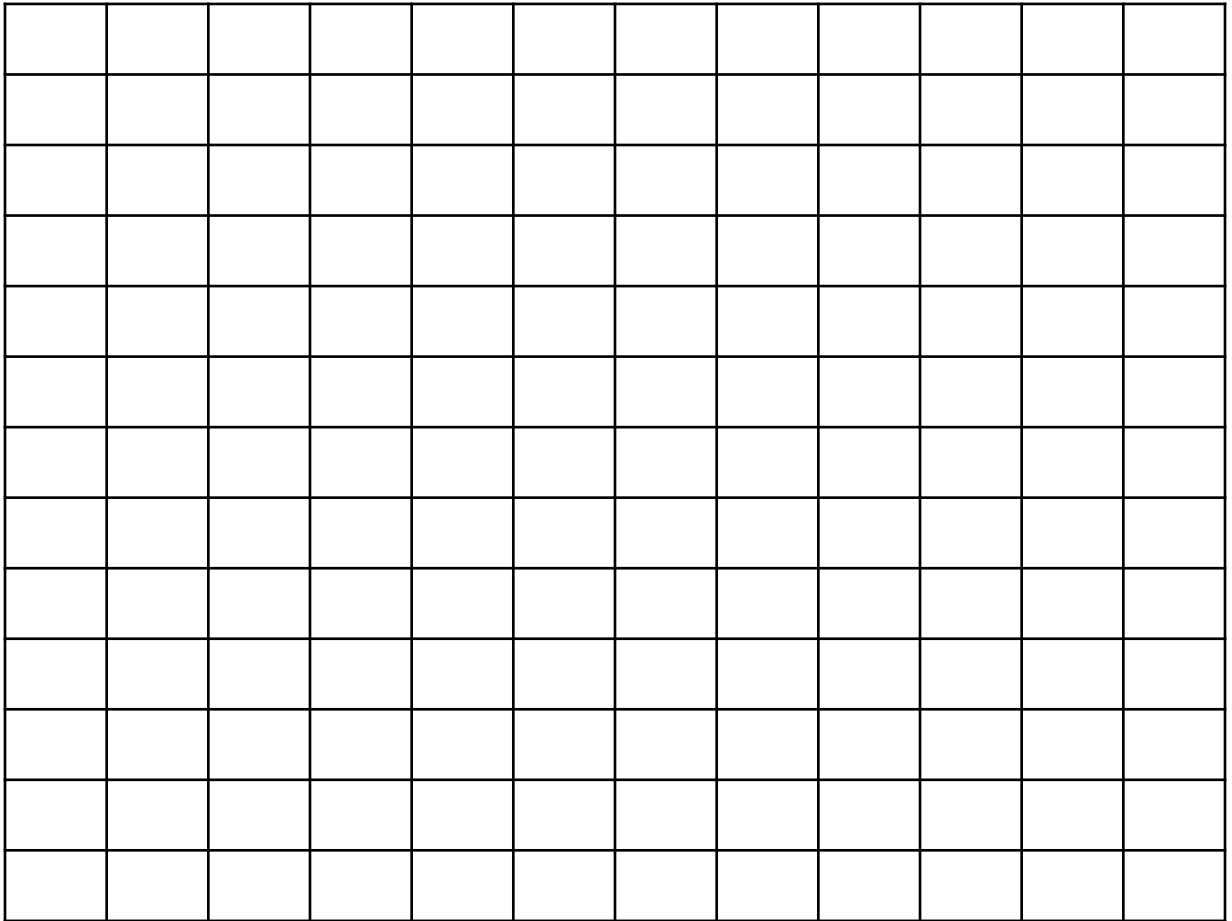
ACROSS   DOWN

❑   ❑

❑   ❑

❑   ❑

❑   ❑

❑   ❑

❑   ❑

❑   ❑

Maths Activity 3a – Ten in ten

1. $783 - 90 =$
2. $48 \times 5 =$
3. $3.4 - 2.9 =$
4. $72 \div 6 =$
5. $7389 - 263 =$
6. $448 \div 8 =$
7. ___ $+ 29 = 761$
8. $1.7 \times 100 =$
9. $651 \times 83 =$
10. 30% of $6500 =$

Challenge
11. $0.8 \times 40 =$
12. $\frac{3}{8} \times \frac{5}{11} =$
13. $300 - 5 \times 7^2 =$
14. 15% of $60 =$
15. $35 \times 1\frac{1}{2} =$

Maths Activity 3b –Drawing line graphs

Today we are continuing to look at line graphs. The format of the questions is a little different as you will see.

For the first activity, the activities are differentiated as follows:

D (developing) = ★

E (expected) = ★★

GD (greater depth) = ★★★

There are Varied Fluency (VF) questions to complete first of all and then move onto the Reasoning and Problem Solving (R / PS) questions which apply your learning.
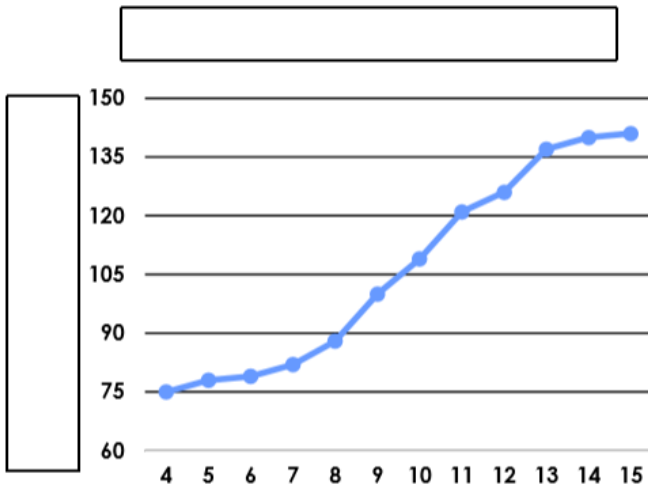
Maths Activity 3b – Drawing line graphs

1a. The table and line graph show the average UK temperatures for the first 6 months of 2017. Plot the missing information on the line graph and table below.

Month	Temperature (°C)
January	
	4
	5
April	7
May	11
June	

Average UK Temperatures in 2017

VF
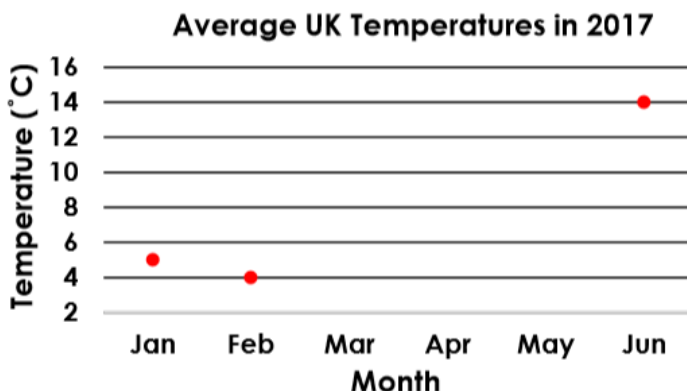
2a. The line graph below shows how tall Jack grew over 11 years in cm. Fill in the missing axes and titles.

VF
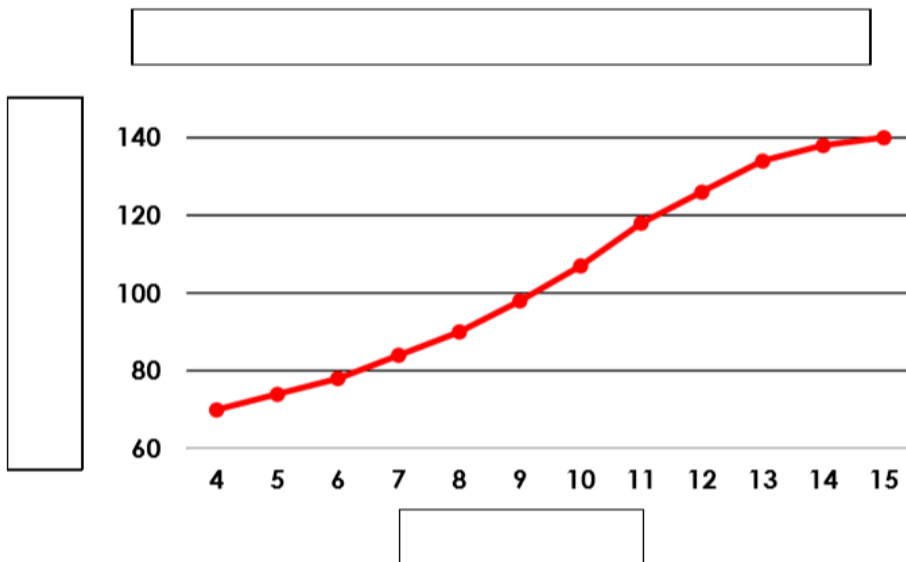
3a. The table shows how tall a sunflower grew over two weeks. Create a line graph to represent this data. A template is provided below.

Day	Height (cm)
2	1
4	4
6	7
8	9
10	11
12	13
14	15

VF

7
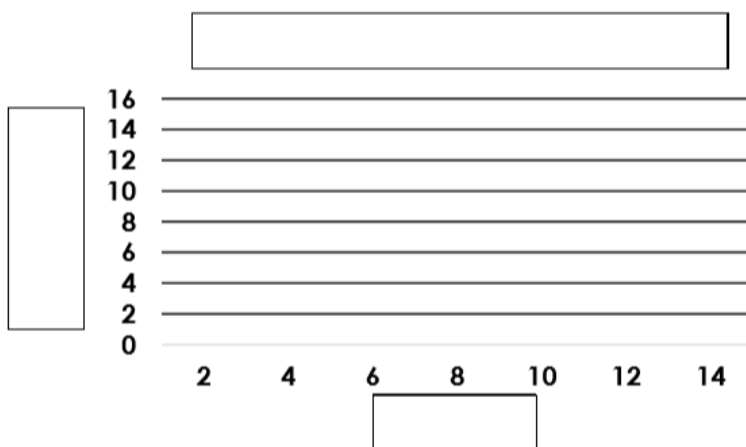
4a. The table and line graph show the average UK temperatures for the last 6 months of 2017. Plot the missing information on the line graph and table below.

Month	Temperature (°C)
July	
August	
	14
	10
November	7
December	

Average UK Temperatures in 2017
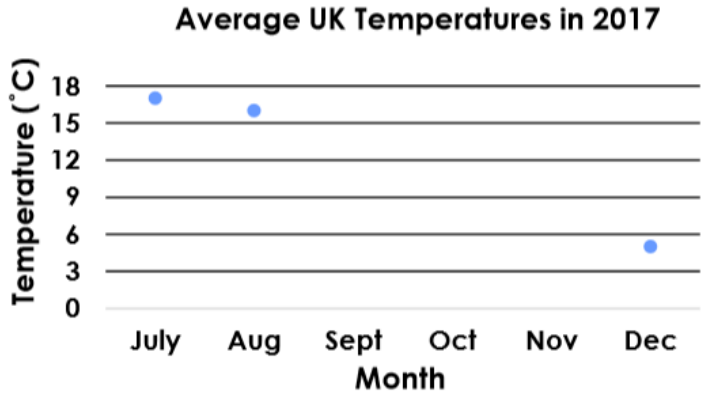
VF

5a. The line graphs below show how tall Jordan and Ellie grew over 11 years in cm. Ellie is 6 years older than Jordan. Fill in the missing axes and titles.
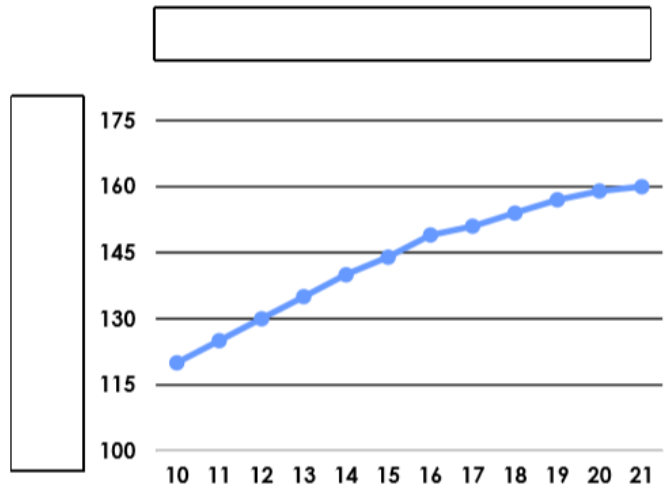
VF

6a. The table shows how far Sid walked each day for a week. Create a line graph to represent this data. A template is provided below.

Day	Distance (km)
Monday	2.8
Tuesday	3.1
Wednesday	2.8
Thursday	2.8
Friday	3.0
Saturday	5.6
Sunday	5.9

8

VF
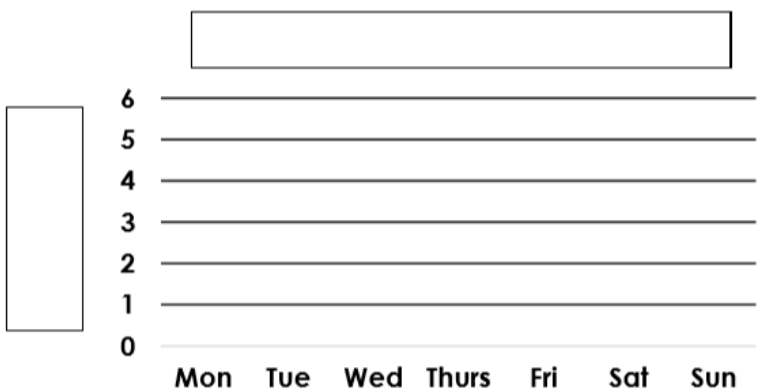
7a. The table and line graph show the average UK temperatures for the first 6 months in 2016 and 2017. Plot the missing information on the line graph and table below.

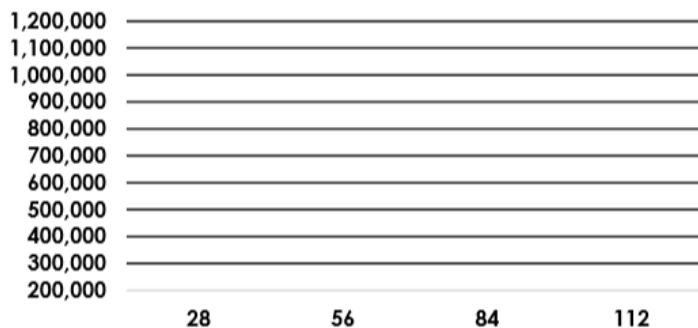| Month	Temperature °C	
	2016	2017
February	4	5
	5	
April		8
		12
June		

GD

VF
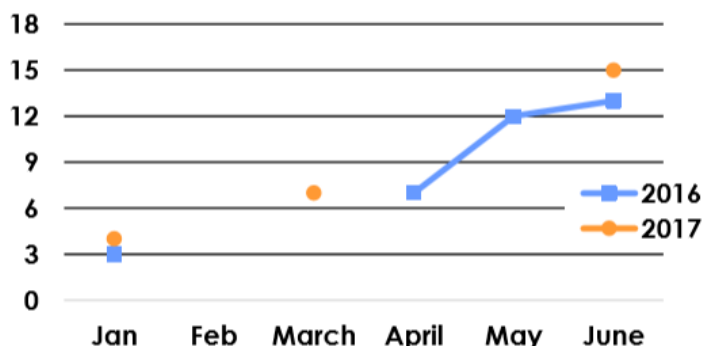
8a. The line graphs below show the changes in Sofia and Sohan's weight in kg in 2011 and 2012. Sofia is and adult and Sohan is a child. Fill in the missing axes and titles.


GD

VF
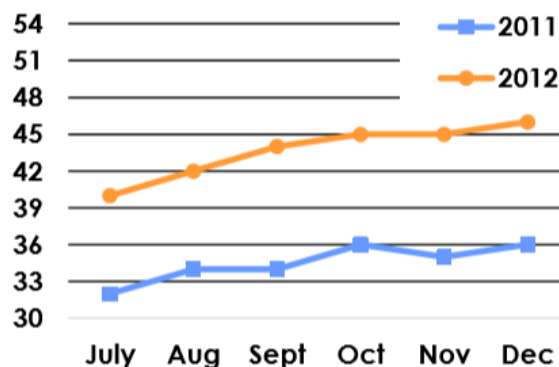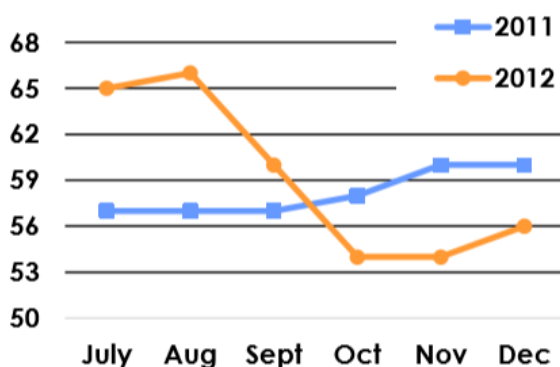
9a. The table below shows how far 2 space shuttles travelled over 168 days. Create a line graph to represent this data. A template is provided below.

Day	Distance (km)	
	Shuttle 1	Shuttle 2
28	280,500	200,000
56	561,000	450,500
84	841,000	675,000
112	1,112,500	980,500

GD

VF

9

Maths Activity 3c – Drawing line graphs

1. The line graph below shows the average midday temperature in London during the year.

Average Midday Temperature in London during the Year

Temperature (°C) vs Month (January, February, March, April, May, June)
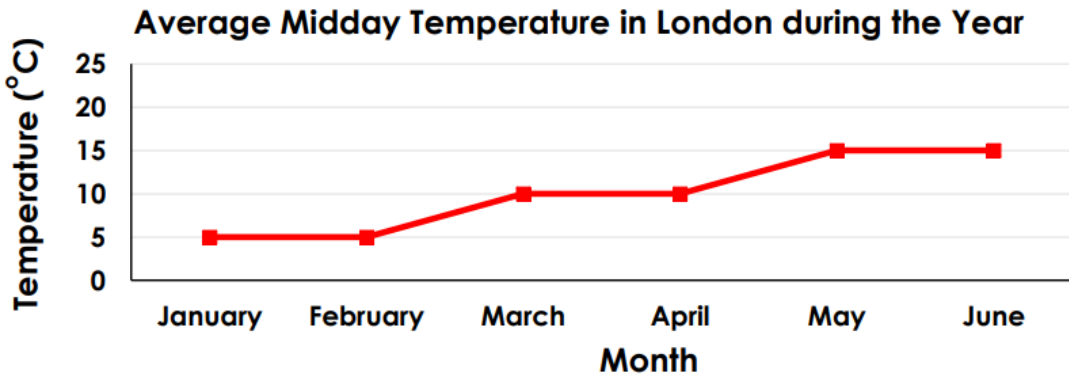
In July and August, the temperature was 25°C. The temperature dropped by 5°C each month after that. Create a new line graph to show the missing data.

D | VF HW/Ext

2. Hailey has recorded how long she spent playing football during the school week in the table below.

Number of Hours Hailey Spent Playing Football

Day	Number of hours Hailey spent playing football
Mon	2
Tue	4
Wed	2
Thu	5
Fri	3
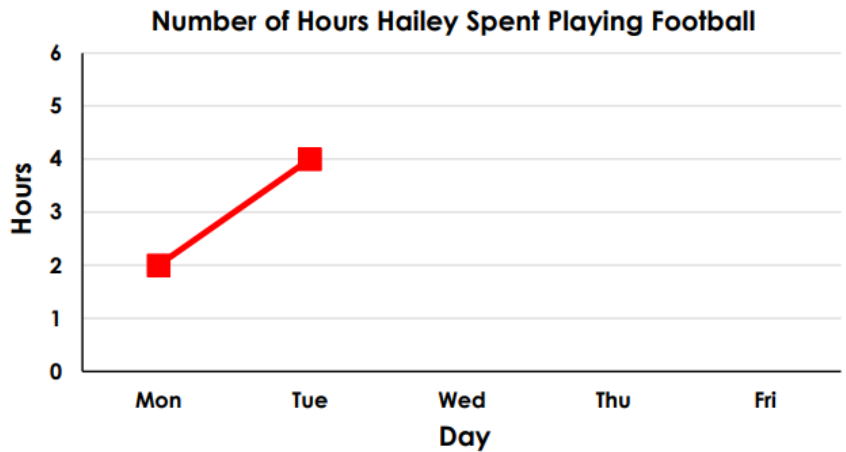
Complete the graph by plotting Hailey's data from the table shown.

D | VF HW/Ext

3. Cai owns a cake shop.
He says,

> I sold 80 cakes in January and then 20 less in February. I sold 10 more cakes the month after and then it doubled the month after that.

Number of Cakes Sold in Cai's Cake Shop

Number of Cakes vs Month (January, February, March, April)
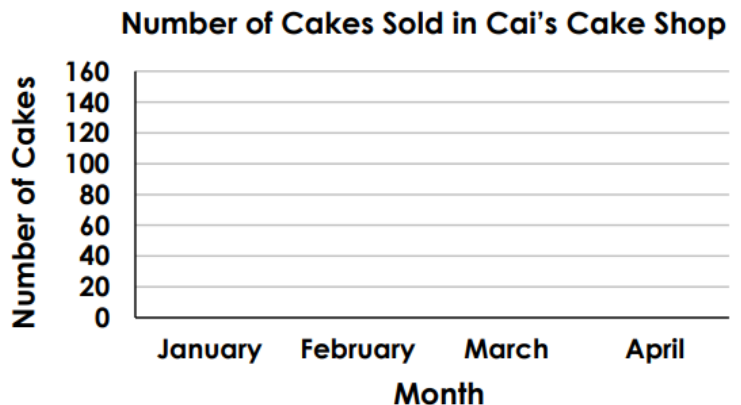
Should Cai keep his shop open if the sales pattern continues?
Draw a line graph to help explain your answer. A template is provided above.

10

RPS HW/Ext

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4. The line graph below shows the average midday temperature in Leeds during the year but it is missing some titles and data.

### Average Midday Temperature in Leeds during the Year
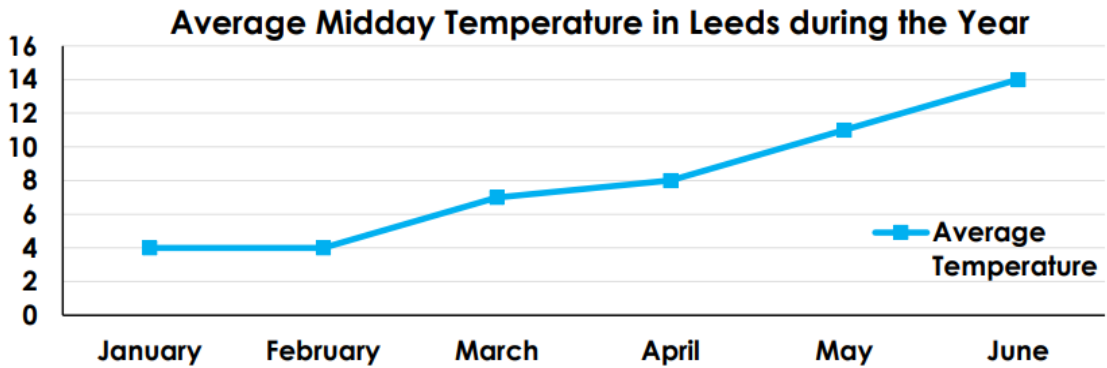
In July and August, the temperature was 18°C. The temperature dropped by 3°C each month after that. Create a new line graph to show the missing titles and data.

E   VF
HW/Ext

5. Steven and Jack have recorded how long they spent playing video games during the school week in the table below.

Day	Number of hours spent playing video games	
	Steven	Jack
Mon	3	4
Tue	2.5	3
Wed	1	2.5
Thu	5.5	4
Fri	6	5

Number of Hours Spent Playing Video Games
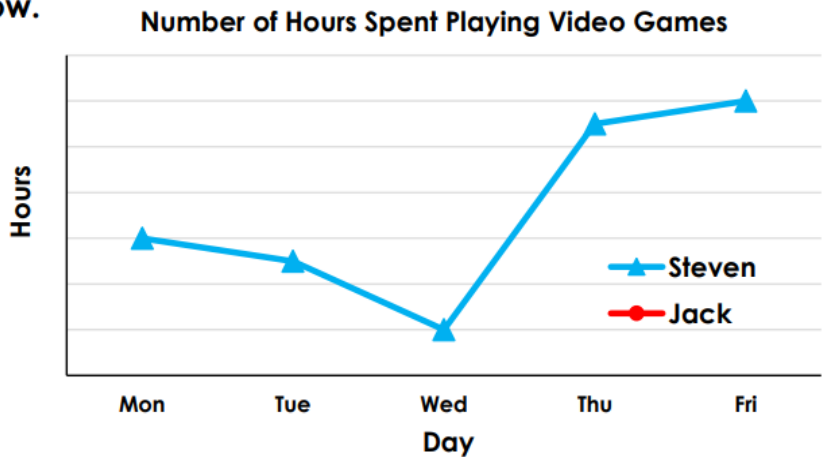
Complete the graph by plotting Jack's data and the missing numbers from the axis.

E   VF
HW/Ext

6. Grace opened two shoe shops but can only afford to keep one open.
She says,

Shop A sold 105 pairs of shoes in January. Shop B only sold 100. The sales of Shop A then doubled the next month but went down 10% the month after that. Shop B tripled its sales in February but went down 20% the month after.
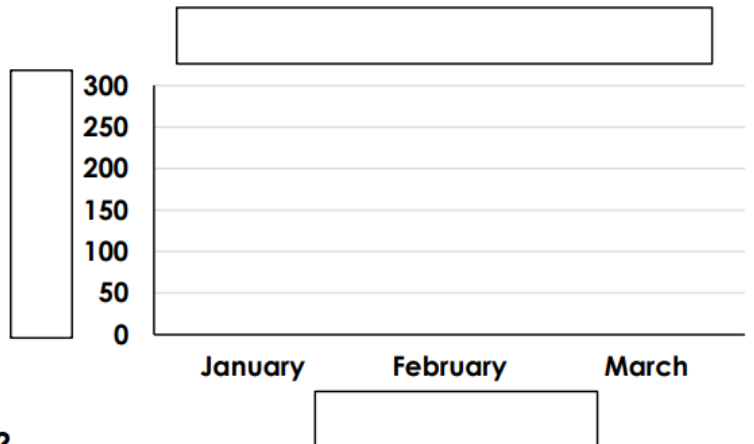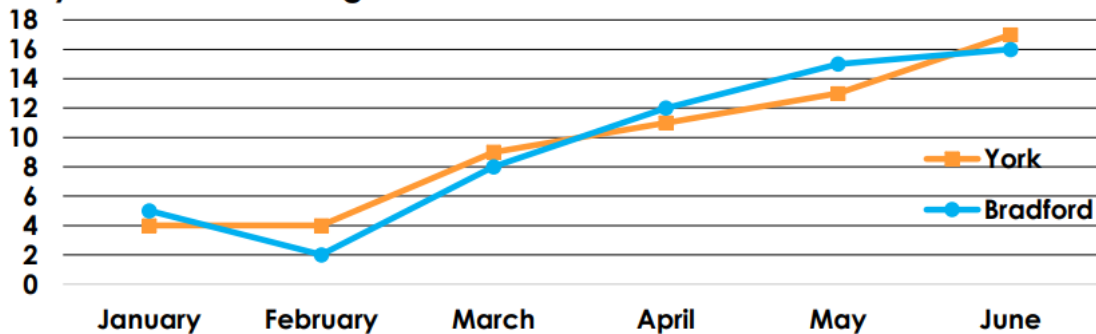

Which store should Grace keep open?
Draw a line graph to help explain your answer. A template is provided above.

11

7. The line graph below shows the average midday temperatures in York and Bradford during the year but it is missing some titles and data.

In July and August, the temperature was 22°C in York and 26°C in Bradford. The temperature dropped by 5°C each month in both cities after that. Create a new line graph to show the missing titles and data.
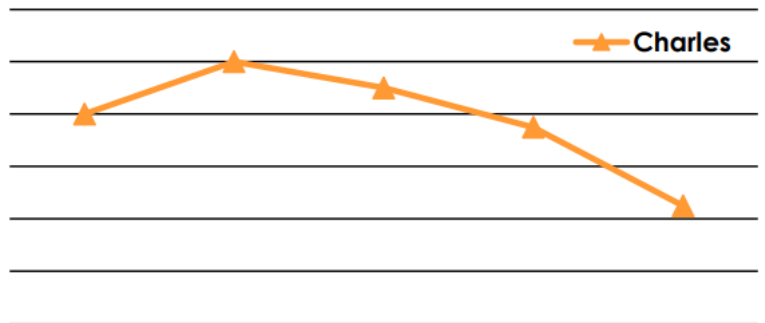
GD ☆

VF
HW/Ext

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8. Charles and Jenny have recorded how long they spent watching television during the school week in the table below.

Number of Hours Spent Watching Television

| Day | Number of hours spent watching television | |
	Charles	Jenny
Mon	4	3
Tue	5	4.5
Wed	4.5	3.75
Thu	3.75	1.75
Fri	2.25	4.5

Complete the graph by plotting the missing data, numbers, days and axes titles.

GD ☆

VF
HW/Ext

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9. Katie opened two perfume shops but can only afford to keep one open.
She says,

Shop A sold 220 bottles of perfume in January. Shop B only sold 180. The sales of Shop A then doubled the next month but went down 15% the month after that. Shop B tripled its sales in February but went down 25% the month after.
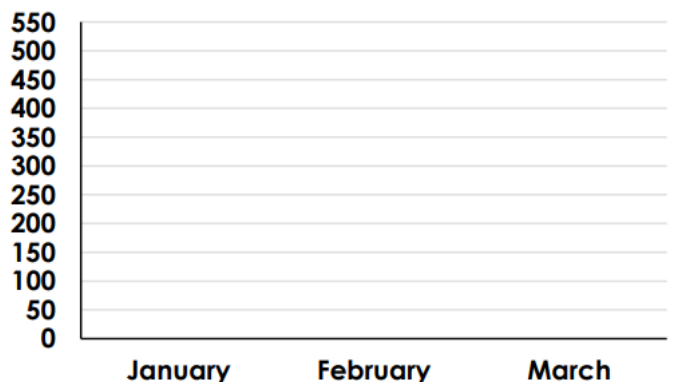
Which store should Katie keep open?
Draw a line graph to help explain your answer. A template is provided above.

GD ☆

RPS
HW/Ext

Maths Activity 3d – Drawing line graphs challenge

Multiply anything by 6

1. Fill in the values of the 6 times table.

x axis	Number	0	1	2	3	4	5	6	7	8	9	10	11	12
y axis	x 6 =													

2. On graph paper, draw the following axes:
    Horizontal: 0 to 12 – call this 'Start number'
    Vertical: 0 to 100 – call this 'product (x 6)'

3. Now plot all the data points from your table on the graph, e.g. (0,0), (1,6), (2,12), etc.

4. Join all your data points using a ruler.
    Give your graph a title.

5. Use your graph to find the following:

    a) 3.5 × 6   b) 7.5 × 6   c) 15 × 6

Challenge

Use your graph to estimate:
- 25 x 6
- 65 x 6
- 37 x 6

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1. 783 – 90 = 693
2. 48 x 5 = 240
3. 3.4 – 2.9 = 0.5
4. 72 ÷ 6 = 12
5. 7389 – 263 = 7126
6. 448 ÷ 8 = 56
7. 732+ 29 = 761
8. 1.7 x 100 = 170
9. 651 x 83 = 54,033
10. 30% of 6500 = 1950

Challenge
11. 0.8 x 40 = 32
12. $\frac{3}{8} \times \frac{5}{11} = \frac{15}{88}$ or equivalent
13. $300 - 5 \times 7^2 = 55$
14. 15% of 60 = 9
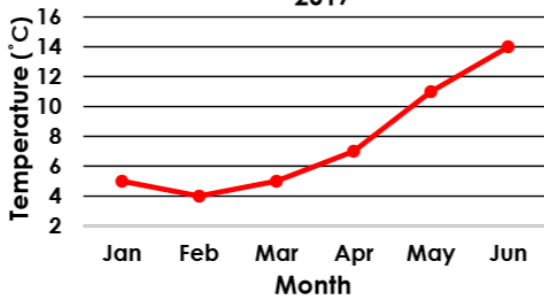15. $35 \times 1\frac{1}{2} = 52\frac{1}{2}$ or equivalent
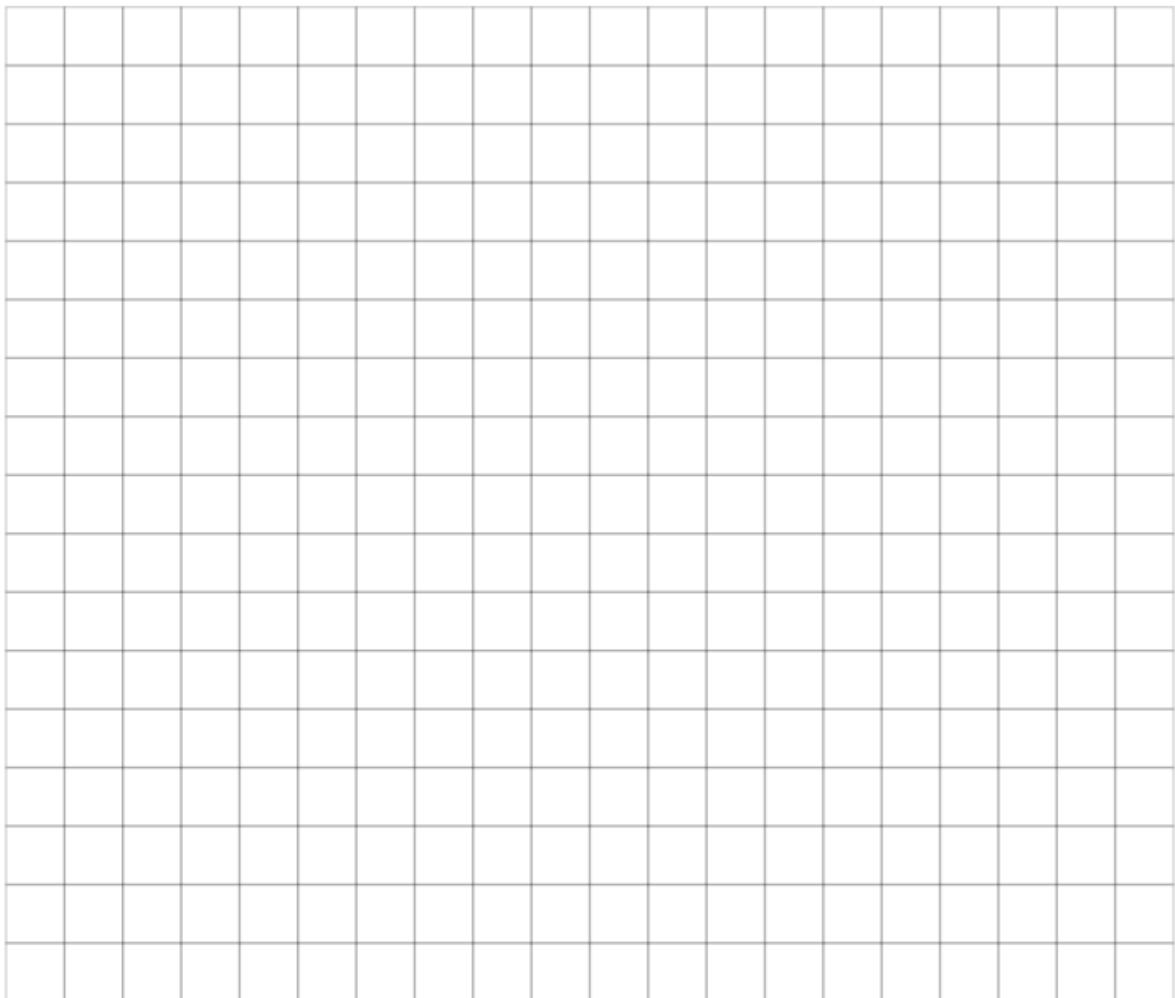
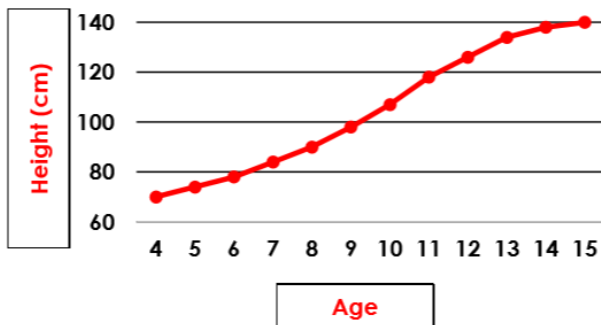# ANSWERS Maths Activity 3b – Drawing line graphs

Developing ★

1a.

Month	Temperature (°C)
January	5
February	4
March	5
April	7
May	11
June	14

Average UK Temperatures in 2017

2a.

Jack's Height over 11 Years

3a.

A Sunflower's Height over 2 Weeks
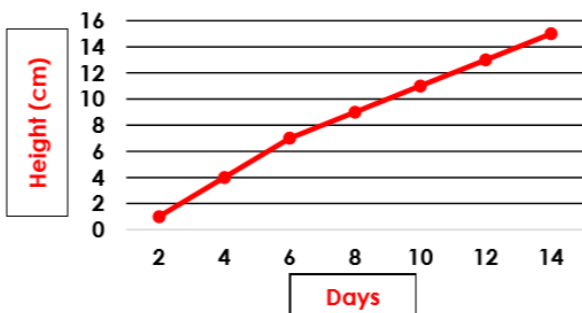
Expected ★★

4a.

Month	Temperature (°C)
July	17
August	16
September	14
October	10
November	7
December	5

Average UK Temperatures in 2017
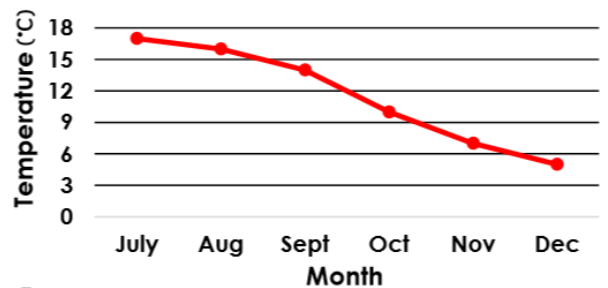
5a.

Jordan's Height over 11 Years
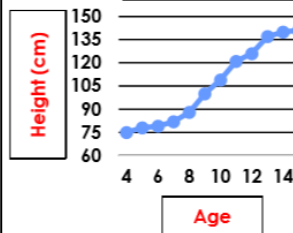
Ellie's Height over 11 Years
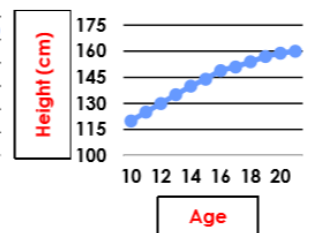
6a.

Distance Walked by Sid in a Week

Greater Depth ★★★

7a.

Month	Temperature °C	
	2016	2017
January	3	4
February	4	5
March	5	7
April	7	8
May	12	12
June	13	15

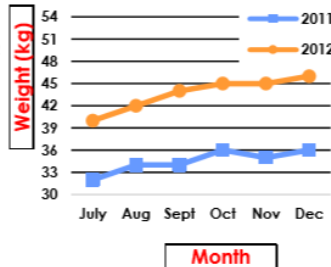**Average UK Temperatures in 2016 and 2017**
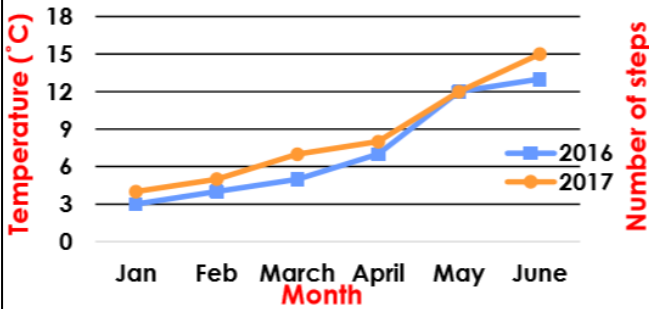
8a.

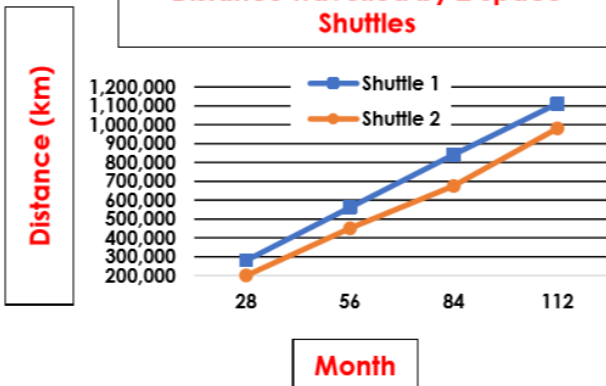**Sofia's Change in Weight in 2011 and 2012**
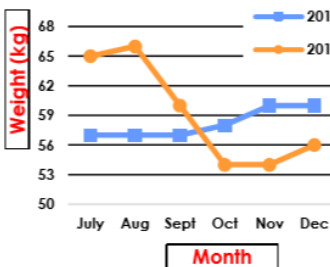
Sohan's Change in Weight in 2011 and 2012
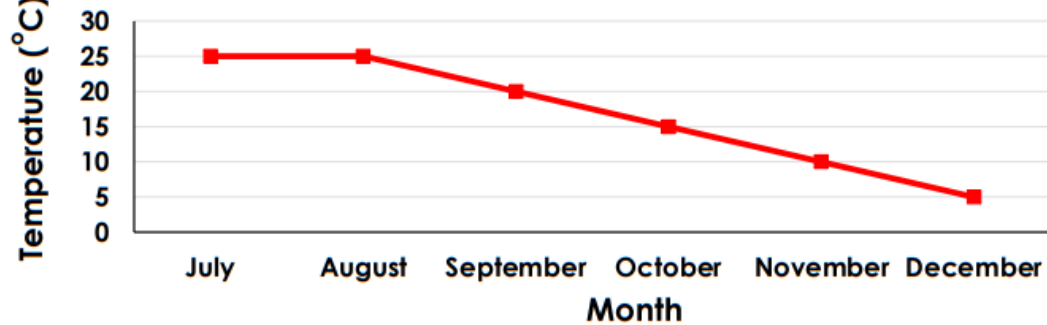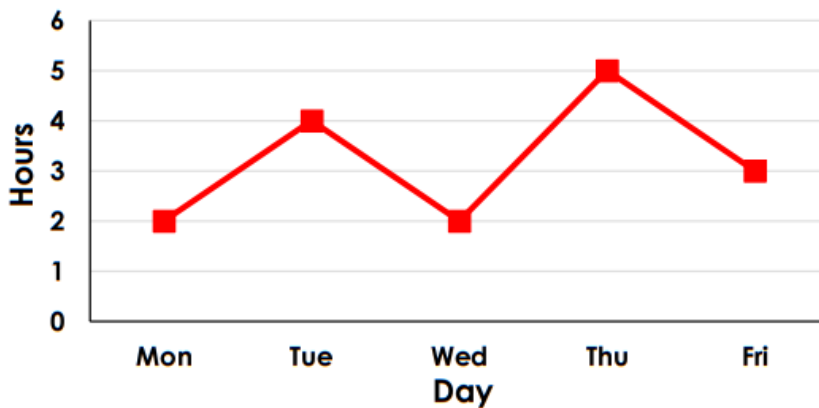

9a.

Distance Travelled by 2 Space Shuttles

Maths Activity 3c – Drawing line graphs

Developing ★

1.

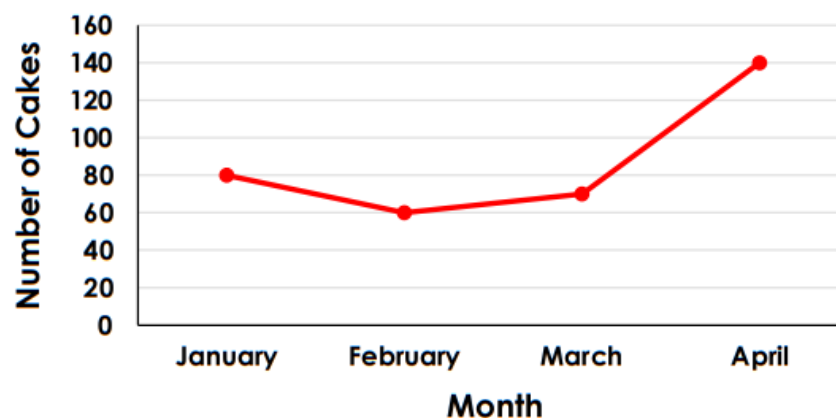**Average Midday Temperature in London during the Year**

A line graph titled "Average Midday Temperature in London during the Year". The y-axis is labelled "Temperature (°C)" with values 0, 5, 10, 15, 20, 25, 30. The x-axis is labelled "Month" with values July, August, September, October, November, December. The plotted values are approximately: July 25, August 25, September 20, October 15, November 10, December 5.

2.

Number of Hours Spent Playing Football

A line graph titled "Number of Hours Spent Playing Football". The y-axis is labelled "Hours" with values 0 to 6. The x-axis is labelled "Day" with values Mon, Tue, Wed, Thu, Fri. The plotted values are: Mon 2, Tue 4, Wed 2, Thu 5, Fri 3.

3. Cai should keep the shop open. Even though it performed poorly in January and February, the sales of cakes is increasing every month after that.
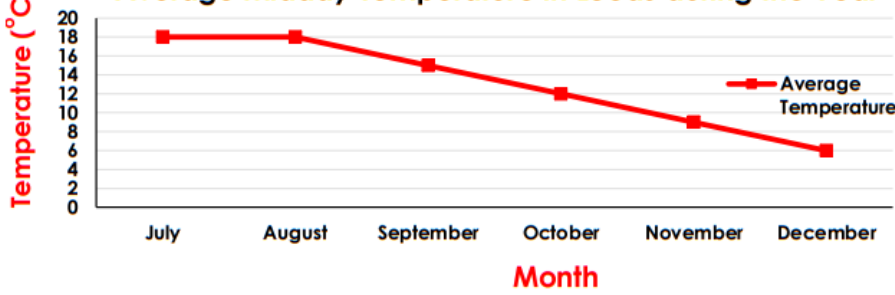
Number of Cakes Sold in Cai's Cake Shop

A line graph titled "Number of Cakes Sold in Cai's Cake Shop". The y-axis is labelled "Number of Cakes" with values 0, 20, 40, 60, 80, 100, 120, 140, 160. The x-axis is labelled "Month" with values January, February, March, April. The plotted values are: January 80, February 60, March 70, April 140.

Expected ★★

4.

Average Midday Temperature in Leeds during the Year

5.

Number of Hours Spent Playing Video Games
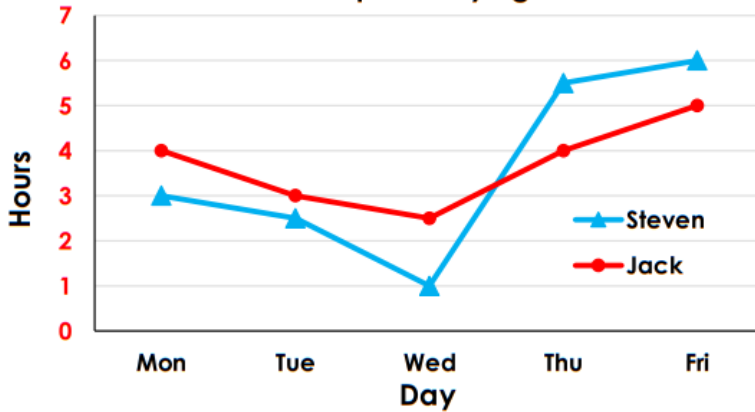
6. Grace should close Shop A instead of Shop B. Although Shop A sold more than Shop B in January, Shop B is performing better overall.
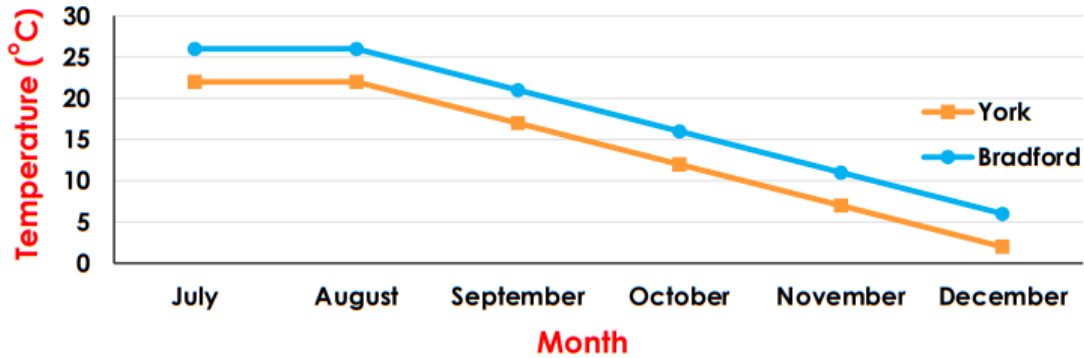
Pairs of Shoes Sold in Two Shops

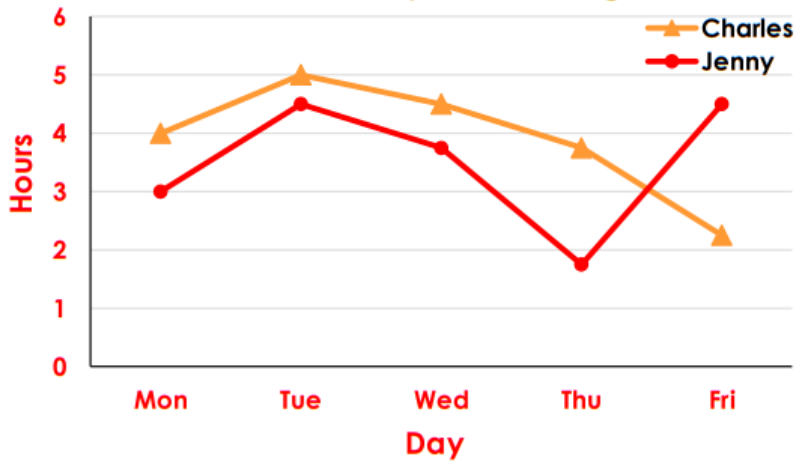# Maths Activity 3b – Drawing line graphs

7.

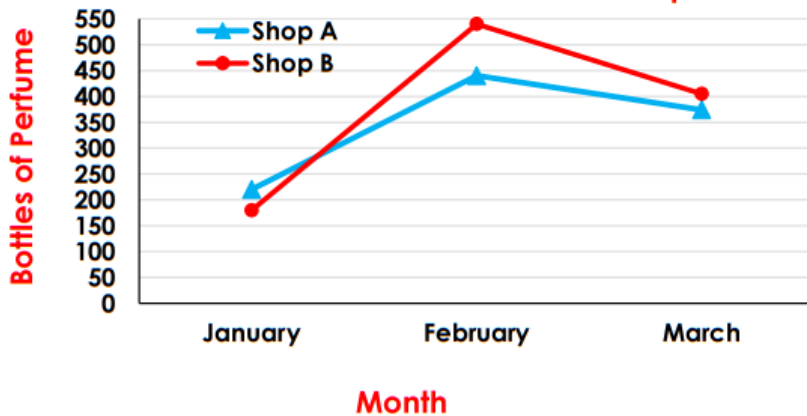**Average Midday Temperature in Bradford and York during the Year**

8.

Number of Hours Spent Watching Television

9. Katie should close Shop A instead of Shop B. Although Shop A sold more than Shop B in January, Shop B is performing better overall.

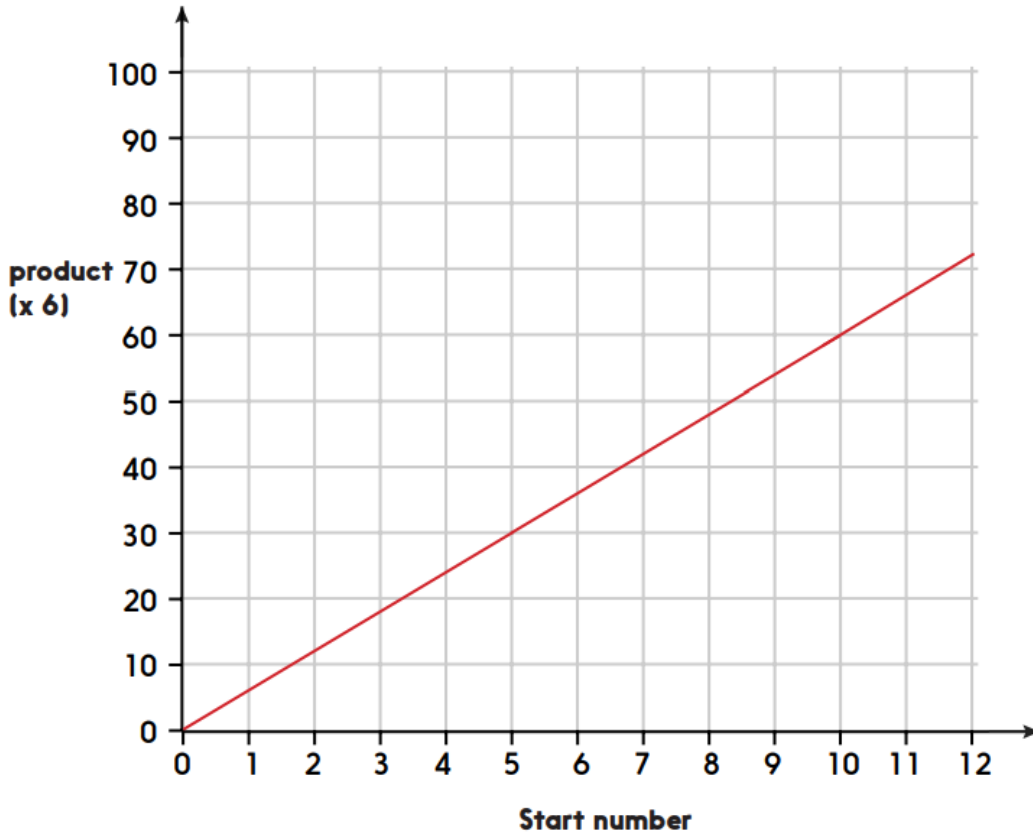**Bottles of Perfume Sold in Two Shops**

<u>Multiply anything by 6</u>

1.

Number	0	1	2	3	4	5	6	7	8	9	10	11	12
x 6 =	0	6	12	18	24	30	36	42	48	54	60	66	72

2.

<u>Line graph to show values in the 6x table</u>

5. estimated from the graph:
   a) 3.5 × 6 = 21   b) 7.5 × 6 = 45   c) 15 × 6 = 90 (estimated by reading 10 x 6 and 5 x 6 from the graph and adding, or doubling 7.5 x 6).

Challenge

Use your graph to estimate:
- 25 x 6   Find 5 x 5 x 6 or 10 x 2.5 x 6 = 150
- 65 x 6   Find 10 x 6.5 x 6 = 390
- 37 x 6   Find (30 x 6) + (7 x 6)
             = (3 x 10 x 6) + (7 x 6) = 180 + 42 = 222

20

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Hot Shots with Slingshots

Create a catapult out of loose parts and design a target, how close to bullseye can you get?

12+

Design & Technology

Background information:

Catapults and slingshots are devices used to launch an object over a large distance without needing gunpowder or other fuel. They were heavily used during medieval siege warfare and in Greek and Roman civilisations so this activity could be a practical interdisciplinary activity linked to relevant **History** topics.

All catapults involve a quick energy transfer providing a nice link to **Science** studies on **Energy**. In slingshots the stretched elastic stores elastic potential energy which is transferred to kinetic energy of the object in motion.

Above all this activity is a fun **STEM** challenge giving pupils the chance to design, test, improve and evaluate.

Suggested Equipment
Elastic bands/hair bobbles
Bungees
Inner tubes
Wooden planks
Sticks
String
Material
Scissors
Tennis balls/bean bags or similar projectile
Cardboard
Tape Measure

Activity

- Start by designing a cardboard target for a tennis ball. It could have zones, dart board sections or just be a Bad Piggy à la Angry Birds!
- Explain to the children that they are going to work in teams to design a launcher for their tennis ball projectile (or angry bird if you prefer) in order to hit the target.
- Discuss their thoughts on how to launch a ball. It could be a slingshot (as pictured) or they may prefer a catapult or trebuchet-style design using planks and sticks.
- Give the teams time to make and test their creations and then have a grand launch.
- If missiles are falling short, measure the distance travelled from the launcher.
- To finish, evaluate the designs, discuss material choices, possible improvements etc.

For more resources visit www.ltl.org.uk/free-resources

Learning through Landscapes